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#### UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

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AUG 9 2010

Mr. James McIndoe
Chief, Water Division
Alabama Department of Environmental
Management
P.O. Box 301463
Montgomery, Alabama 36130-1463

Re: Review of Revised Draft General Permit for Phase II Small Municipal Separate Storm Sewer Systems (MS4s) Issued by Alabama on May 18, 2010

Dear Mr. McIndoe:

On January 14, 2010, the U. S. Environmental Protection Agency (EPA), Region 4 received a draft National Pollutant Discharge Elimination System (NPDES) general permit for Phase II Small Municipal Separate Storm Sewer Systems (MS4) in Alabama. In a letter dated April 1, 2010, EPA provided comments but did not object to the draft permit, which was developed by the Alabama Department of Environmental Management (ADEM) after extensive discussions between EPA and ADEM regarding its terms. In our April 1, 2010, comment letter, EPA commended ADEM for its inclusion of clear, specific, measurable, and enforceable provisions and performance standards in the draft permit, noting that compliance audits of MS4 programs conducted by EPA Region 4 had demonstrated that the absence of clear, specific, measurable, and enforceable provisions and performance standards leads to poor MS4 performance.

On May 11, 2010, ADEM provided the above-referenced revised draft permit to EPA, which has been revised by ADEM to address public comments received. ADEM issued the above-referenced revised draft permit for public review and comment on May 18, 2010. EPA has reviewed the revised draft permit and determined it does not meet the requirements of the Clean Water Act (CWA). This determination is due to the lack of important permit terms and conditions required pursuant to CWA Section 402(p)(3)(B)(iii) and 40 C.F.R. §§122.34 and 122.35. These deficiencies relate to:

- (1) the lack of adequate requirements for implementation and enforcement of construction site stormwater runoff controls to prevent or minimize water quality impacts from construction site stormwater discharges to the maximum extent practicable (MEP), pursuant to 40 C.F.R. §§122.34(a) and 122.34(b)(4);
- (2) the lack of either a requirement that permittees remain responsible for compliance with the minimum control measures when relying on another entity to perform such measures, pursuant to 40 C.F.R. §122.35(a), or recognition in the permit of any governmental entity with responsibility under its NPDES permit to implement any control measure on behalf of any small MS4, pursuant to 40 C.F.R. §122.35(b);

- (3) the lack of adequate controls to prevent or minimize water quality impacts from post-construction stormwater discharges to the MEP, pursuant to 40 C.F.R. §§122.34(a) and 122.34(b)(5); and
- (4) postponement of full implementation of the permit requirements until the end of the permit term.

Accordingly, this letter notifies ADEM of EPA's specific objections to the draft permit in accordance with 40 C.F.R. §123.44 and Section IV.B.7. of the Memorandum of Agreement (MOA) between EPA and Alabama.

A detailed explanation of the basis for our specific objections is set forth in the enclosure. In addition to the basis for our objections, the enclosure includes comments for your consideration with respect to other aspects of the draft permit that we reviewed. Our objections are consistent with our previous comments and discussions on reissuance of this permit, and are informed by our review of other MS4 permits throughout the Region, and our review of implementation of MS4 permits via audits of many MS4 programs throughout the Region, including MS4 programs in Alabama. Our audits have repeatedly shown the need for prescriptive, measurable and enforceable requirements in permits to clarify the obligations of permittees and ensure that permittees implement controls to reduce the discharge of pollutants to the MEP, as required by Section 402(p)(3)(B) of the CWA.

I request that you address the specific objections expressed in the enclosure and submit to EPA, under the provisions of Section IV.B.7 of the MOA, a proposed final permit and a revised fact sheet that addresses the specific objections. Within ninety (90) days of your receipt of these objections, a public hearing on EPA's objections may be requested in accordance with 40 C.F.R. §123.44(e). If no public hearing is held, and you do not submit a permit revised to address these objections within 90 days of receipt of these objections, exclusive authority to issue the permit passes to the EPA pursuant to 40 C.F.R. §123.44(h)(3).

Our office is committed to working with you on an expedited basis to resolve the issues in a manner that ensures the issuance of a final permit that is consistent with the requirements of the CWA. We look forward to working with you to achieve that objective. If you have any questions, please call me at (404) 562-9345 or have your staff contact Thomas McGill at (404) 562-9243, or Michael Mitchell at (404) 562-9303.

Sincerely,

Yamés D. Giattina

Director

Water Protection Division

Enclosure

### Enclosure to EPA's Letter Regarding the Review of the Revised Draft General Permit for Phase II Small MS4s Issued by Alabama on 5/18/2010

### I. Objections to Draft Permit

Section 402(p)(3)(B) of the Clean Water Act (CWA) provides that municipal separate storm sewer system (MS4) permits must require controls to reduce the discharge of pollutants to the maximum extent practicable (MEP). This requirement is repeated in regulations applicable to Phase II MS4s at 40 C.F.R. §122.34(a), which provides that generally, "narrative effluent limitations requiring implementation of best management practices" will satisfy the MEP standard. 40 C.F.R. §122.34(b) sets forth certain "minimum control measures" that must be included in Phase II MS4 stormwater management programs in order to satisfy the MEP standard. The minimum control measures are described in a general fashion in 40 C.F.R. §122.34(b); however, it is up to the permitting authority to issue permits with effluent limitations that specify the performance obligations of permittees to ensure implementation of MEP-level controls. As stated in the preamble to the regulations promulgated by EPA for Phase II MS4s<sup>1</sup>, for general permits, "the NPDES permitting authority will establish requirements for each of the minimum control measures."

The preamble to the regulations promulgated by EPA for Phase II MS4s also describes an iterative process for achieving an MEP level of control:

EPA envisions application of the MEP standard as an iterative process. MEP should continually adapt to current conditions and BMP effectiveness and should strive to attain water quality standards. Successive iterations of the mix of BMPs and measurable goals will be driven by the objective of assuring maintenance of water quality standards. If, after implementing the six minimum control measures there is still water quality impairment associated with discharges from the MS4, after successive permit terms the permittee will need to expand or better tailor its BMPs within the scope of the six minimum control measures for each subsequent permit. EPA envisions that this process may take two to three permit terms.

EPA notes that the initial permit for Phase II small MS4s in Alabama was issued on March 10, 2003 and expired on March 9, 2008. ADEM issued a draft general permit for Phase II small MS4s on January 14, 2010, which reflected the second iteration of permit requirements for existing Phase II MS4s in Alabama. ADEM revised the draft permit and issued it for public review and comment on May 18, 2010. The revisions, as described in more detail below, removed several important permit requirements that were included in the initial draft permit that was issued on January 14, 2010.

As a result of changes made between the draft permit issued on January 14, 2010 and the current draft permit issued on May 18, 2010, the May 18, 2010 draft permit includes deficiencies relating to:

<sup>&</sup>lt;sup>1</sup> See Federal Register 68754, Dec. 8, 1999.

- the lack of adequate controls to prevent or minimize water quality impacts from construction site stormwater discharges to the maximum extent practicable (MEP), pursuant to 40 C.F.R. §§122.34(a) and 122.34(b)(4);
- the lack of either a requirement that permittees remain responsible for compliance with the minimum control measures when relying on another entity to perform such measures pursuant to 40 C.F.R. §122.35(a), or recognition in the permit of any governmental entity with responsibility under its NPDES permit to implement any control measure on behalf of any small MS4, pursuant to 40 C.F.R. §122.35(b);
- the lack of adequate controls to prevent or minimize water quality impacts from post-construction stormwater discharges to the MEP, pursuant to 40 C.F.R. §§122.34(a) and 122.34(b)(5); and
- postponement of full implementation of the permit requirements until the end of the permit term.

#### 1. Construction Site Stormwater Runoff Control

Objection based on absence of sufficient requirements for ensuring implementation of construction site stormwater runoff minimum control measure

The draft permit submitted to EPA on January 14, 2010 included provisions relating to controls of pollutants from construction site stormwater discharges, which collectively would ensure the reduction of such pollutants to the MEP. Several provisions, for example, would have appropriately set forth reasonable and practicable performance standards for site inspections and enforcement of control measures including the following:

Part III.B.4.(c) of the draft permit specified minimum frequencies for inspection of active construction sites, and would have required all sites of one (1) acre or larger that discharge to portions of the MS4 which discharge to a water impaired for sediment or turbidity or with an EPA-approved Total Maximum Daily Load (TMDL) with a pollutant of concern likely to be contained in construction stormwater discharges to be inspected at least monthly. For all other sites, permittees were required to inspect construction sites at a frequency based on criteria to be defined by the Permittee in an inspection plan.

EPA's preference would be to include in the permit minimum inspection frequencies for all categories of active construction sites of one (1) acre or larger, and not just sites discharging to impaired waters or waters subject to a TMDL. However, EPA did not indicate that it would object to the inspection frequency contained in the draft permit because the monthly inspection frequency for sites discharging through the MS4 to waters that are impaired or subject to TMDLs

would focus on sites that EPA agrees should be given the highest priority.<sup>2</sup> Further, the provision at least required the permittees to categorize and establish inspection frequencies for other categories of sites.

- Part III.B.4.(d) of the draft permit contained a requirement to develop and implement an Enforcement Response Plan (ERP). The ERP would be required to describe the permittee's potential enforcement responses to violations and explain how the permittee would deal with repeat violations through progressively stricter responses to achieve compliance. The ERP would further be required to contain descriptions of how the permittee would use specific types of responses, including verbal warnings, written notices, escalated enforcement measures such as citations, stop work orders, etc., to addresses various types of violations and to escalate enforcement response where necessary to address persistent, repeat or escalating violations.
- Part III.B.4.(f) would have required the permittees to track instances of noncompliance and enforcement. This provision would have required enforcement case documentation to include the required schedule for returning to compliance, a description of enforcement responses used, and accompanying documentation of enforcement responses.

However, in the May 18, 2010 draft permit, ADEM has removed these provisions and replaced them with a provision requiring only "plans and procedures for the periodic surveillance of the regulated MS4 for the purposes of identifying potential discharges of sediment and other pollutant[s] from qualifying construction activities. Each area of the MS4 must be surveyed at least once each month." This provision would not require inspections of any construction sites. The required "periodic surveillance of the regulated MS4" could be conducted through simple driving tours of the MS4 area, or examination of MS4 outfalls for signs of sediment in stormwater, instead of actual inspections of construction sites for compliance with sediment and erosion control requirements.

EPA has found, based on its own audits of MS4 programs in Region 4, including MS4 programs within Alabama, that the absence of clear, specific, measurable and enforceable requirements in MS4 permits generally leads to permittees falling short of implementing appropriate controls to reduce the discharge of pollutants to the MEP. Under EPA regulations, the construction stormwater control program for an MS4 must include procedures for site inspection and enforcement of control measures. 40 C.F.R. §122.34(b)(4)(ii)(F). While Part III.B.4.(a) of the May 18, 2010 draft permit does include a requirement for the stormwater management program (SWMP) to include "procedures for site inspection and enforcement of control measures," there is no minimum level of effort or frequency specified in this provision, and it only applies to MS4s that choose not to rely on ADEM for enforcement of appropriate erosion and

<sup>&</sup>lt;sup>2</sup> The draft permit actually referred to sites discharging to impaired waters and waters subject to a TMDL; EPA interpreted this requirement to apply to sites that discharge to portions of an MS4 that drain to a water that is impaired or subject to a TMDL, because the MS4 program is focused on pollutants that are discharged to waters of the United States via MS4s.

sediment controls, as authorized in subparagraph (b) of Part III.B.4 of the May 18, 2010 draft permit, which is discussed below.

The absence of provisions specifying objectively measurable performance obligations results in a permit that does not establish effluent limitations to control discharge of pollutants in municipal stormwater discharges to the MEP, as required by CWA Section 402(p)(3)(B)(iii), by allowing permittees to determine effluent limitations on their own. In order to impose requirements that ensure control of pollutants in construction stormwater discharges "to the maximum extent practicable," the permit must include objectively implementable provisions, such as a requirement for a systematic program of regular inspections of construction sites, performed in accordance with appropriate standard operating procedures for construction site inspections, with some minimum frequency by staff trained in sediment and erosion control at construction sites.

Similarly, the permit must describe what constitutes enforcement of construction site stormwater control measures "to the maximum extent practicable." The requirement in Part III.B.4.(d) of the January 2010 draft permit to develop and implement an ERP would have addressed this requirement. Under that draft provision, MS4s would have been required to identify specific strategies for escalating enforcement to address persistent, repeat and escalating violations within the ERP, thereby ensuring that enforcement programs are reasonably effective in reducing pollutant discharges to the MS4. Additionally, Part III.B.4.(f) of the draft permit, which would have required MS4s to establish an enforcement and compliance tracking system, is a further example of a basic component of an effective construction enforcement program. Accordingly, with respect to the May 18, 2010 draft permit, the absence of any clear, specific, measurable, and enforceable provisions with respect to these activities results in a permit which does not require controls to reduce the discharge of pollutants to the MEP, as required by Section 402(p)(3)(B) of the CWA and 40 C.F.R. §122.34, and therefore is subject to objection under 40 C.F.R. §123.44(c)(1) and (7).

The May 18, 2010 draft permit also provides that "the Permittee may rely on ADEM for enforcement of appropriate erosion controls and sediment controls for qualifying construction sites." This provision was not included in the version of the draft permit submitted for EPA review on January 14, 2010. As further explained below, based on EPA's understanding of ADEM's program, including enforcement, this new provision falls short of the requirement to include controls to reduce the discharge of pollutants to the MEP in the permit, as required by Section 402(p)(3)(B) of the CWA and 40 C.F.R. §122.34(a), and therefore is subject to objection under 40 C.F.R. §123.44(c)(1) and (7).<sup>3</sup>

<sup>&</sup>lt;sup>3</sup> During EPA's State Water Program Evaluation, which is currently underway, ADEM responded in writing to a question regarding whether there are any gaps between ADEM staffing levels and the current and future resource needs of the program by indicating that "current program revenues are not meeting program expenses." In that response, ADEM cited the construction stormwater program as a particular concern, stating that "the construction stormwater program receives no federal funds," and that "as a result of the downturn in the economy, the fees the Department collects to operate this program have significantly declined." ADEM also noted that it anticipates a 10% budget cut for its water program in 2010.

The regulations applicable to Phase II MS4s do contemplate scenarios where an MS4 may rely upon the permitting authority to implement a minimum control measure on its behalf. 40 C.F.R § 122.35(b). However, this would require a more robust regulatory presence within the MS4 than is currently provided by ADEM. ADEM's State-wide NPDES construction stormwater regulatory program currently lacks any specific focus or additional initiatives and commitments in the MS4 jurisdictions. EPA has determined that without significant modification or enhancement, ADEM's current program would not fulfill the oversight and enforcement responsibilities required of its permittees for those permittees choosing to rely on the State's program. As a result, EPA has concluded that enabling permittees to rely on the State's enforcement program does not fulfill the requirements of the construction site stormwater runoff minimum control measure.

For example, a critical component of MS4 construction programs, as discussed above, is implementation of an inspection program with an inspection frequency consistent with MEP-level control. ADEM has historically inspected ten to fifteen percent of its active construction sites annually on a State-wide basis. At this rate, most construction sites within any MS4 would never be inspected. While this rate may be minimally adequate to discharge ADEM's responsibilities for the State-wide NPDES program, simply continuing ADEM's preexisting State-wide program for inspection of construction sites does not fulfill the independent responsibility of MS4s to have an MEP-level construction stormwater program to control stormwater discharges to the MS4. Similarly, relying on ADEM to carry out the MS4's enforcement responsibilities. absent any commitment or agreement for increased focus within the relevant MS4, is not adequate to carry out an intended purpose of the MS4 program (i.e., focus stormwater pollutant reduction measures at the local level within regulated MS4s to better address the substantial water quality impacts resulting from pollutants in urban stormwater discharges). In addition, the minimum control measure for reduction of pollutants in construction stormwater discharges, as described in 40 C.F.R. §122.34(b)(4)((ii), specifies that MS4s must include "procedures for site plan review which incorporate consideration of potential water-quality impacts." EPA understands that ADEM generally does not review the site plans of applicants for coverage under Alabama's construction general permit, and has not made any commitment to do so on behalf of the MS4s that choose to defer to ADEM for enforcement of a construction program.

Significantly, the May 18, 2010 draft permit contains a number of requirements that are only applicable to permittees who elect not to rely on ADEM's enforcement program. In the previous version of the permit submitted for EPA review on January 14, 2010, these requirements were applicable to all permittees. The requirements that, under the May 18, 2010 draft permit are only applicable to the subset of permittees who choose not to rely on ADEM, include: (1) adoption of an ordinance or other regulatory mechanism to require erosion and sediment controls, as well as sanctions to ensure compliance; (2) requirements for construction site operators to implement appropriate

<sup>&</sup>lt;sup>4</sup> ADEM's historic inspection rate for construction sites is consistent with EPA's national NPDES Compliance Monitoring Strategy, which provides for annual inspection by authorized states of at least 10% of permitted construction sites disturbing 5 or more acres and 5% of permitted construction sites disturbing one to five acres.

erosion and sediment controls consistent with the Alabama Handbook for Erosion Control, Sediment Control, and Stormwater Management on Construction Sites and Urban Areas; (3) requirements for construction site operators to control waste such as discarded building materials, concrete truck washout, chemicals, litter, and sanitary waste at the construction site that may cause adverse impacts to water quality; (4) procedures for site plan review, which incorporate consideration of potential water quality impacts; (5) procedures for receipt and consideration of information submitted by the public; (6) procedures for site inspection and enforcement of control measures; and (7) procedures to ensure implementation of required post-construction controls. Again, the May 18, 2010 draft permit specifies that all permittees may choose to rely on ADEM instead of fulfilling any of these requirements locally, yet ADEM does not have a program and resources in place to undertake these obligations on behalf of these MS4s and has no commitment or obligation to expand its pre-existing construction stormwater regulatory program to provide a local focus within these MS4 jurisdictions beyond what it was already doing at the state level. Thus, with respect to control of pollutants in construction stormwater discharges to the MS4, a very significant area of MS4 pollution, EPA has determined that the draft permit would not require Phase II MS4s in Alabama to reduce the discharge of pollutants from the MS4 to the MEP.

To address EPA's objection regarding the Construction Site Stormwater Runoff Control Minimum Control Measure, ADEM must make the following revisions to the draft permit:

- Remove the provision which authorizes permittees to "rely on ADEM for enforcement of appropriate erosion controls and sediment controls for qualifying construction sites:" and
- Either restore the provisions from the original draft permit related to minimum inspection frequency, ERP development and implementation, and implementation of an enforcement tracking system, or develop alternative requirements that provide clear, specific, measurable and enforceable performance standards regarding the components of an effective inspection and enforcement program that must be implemented. Examples of such alternate requirements can be found in EPA's "MS4 Permit Improvement Guide" which is available on our website at: <a href="https://www.epa.gov/npdes/pubs/ms4permit\_improvement\_guide.pdf">www.epa.gov/npdes/pubs/ms4permit\_improvement\_guide.pdf</a>.

If the permit were issued by EPA it would include a provision requiring the development and maintenance of an inventory of active construction sites and inspection of such sites at specific minimum frequencies (at least monthly inspections of all active construction sites) by appropriately trained staff. A permit issued by EPA would also include requirements for development and implementation of an ERP, which would include requirements for escalating enforcement in response to persistent, repeat, or escalating violations, and development and maintenance of an enforcement tracking system. In addition, if EPA were issuing this permit, the authorization to rely on ADEM for enforcement of appropriate erosion controls and sediment controls would not be included in the permit.

# 2. General Authorization to Rely on Another Entity for Performance of Minimum Control Measures

Objection based on absence of a provision that either provides: that permittees remain responsible for compliance with minimum control measures when relying on another entity to perform measures; or recognition of any governmental entity with responsibility under its NPDES permit to implement any control measure on behalf of any small MS4

Part II.C.2.c. of the draft permit contains a provision describing additional circumstances where a permittee may rely on another governmental entity or entities (other than ADEM) to implement a minimum control measure. Specifically, Part II.C.2.c. of the draft permit, would require MS4s applying for permit coverage to include on the Notice of Intent form, "the identity of that entity(ies) and the element(s) they will be implementing and include a copy of a legal binding agreement with that entity." The January 14, 2010 draft permit included an additional sentence in this section stating that the permittee would "remain responsible for compliance if the other entity fails to fully perform the permit obligation, and may be subject to enforcement action if neither [the permittee] or the other entity fully performs the permit obligation." 40 C.F.R. §122.35(a) authorizes reliance on another entity when specific conditions for such reliance are met: (1) the other entity actually implements the control measure, (2) the control measure implemented by another entity is at least as stringent as the NPDES permit requirement, and (3) the other entity agrees to implement the control measure on the permittee's behalf and the permittee remains responsible for compliance with the permit obligation if the other entity fails to implement the control measure. ADEM's removal of the sentence clarifying that the permittee would "remain responsible for compliance if the other entity fails to fully perform the permit obligation, and may be subject to enforcement action if neither [the permittee] or the other entity fully performs the permit obligation" is inconsistent with 40 C.F.R. §122.35(a) and is therefore subject to objection under 40 C.F.R. §123.44(c)(1) and (7).

Similarly, while the draft permit provides for small MS4s seeking general permit coverage to rely on governmental entities subject to regulation under 40 C.F.R §122.26 or 122.32, the provision in Part II.C.2.c. is not consistent with 40 C.F.R §122.35(b). Section 122.35(b) allows the permitting authority to recognize in a permit that another governmental entity is responsible under its NPDES permit for implementing one or more of the minimum control measures on behalf of a small MS4. However, under the draft permit, it is the permittee, rather than ADEM, that "recognizes" that another governmental entity is responsible for carrying out one or more of the minimum control measures on behalf of the permittees. Therefore, because ADEM has not recognized any other governmental entities that are responsible under their NPDES permits for carrying out any of the minimum control measures in small MS4s that may seek coverage under the general permit, the provision in Part II.C.2.c. is inadequate to relieve any small MS4 from ultimate responsibility for carrying out any of minimum control measures as provided by Section 122.35(b).

To address this objection and provide needed clarity on this issue to permittees, ADEM must revise the draft permit to restore this additional sentence informing permittees that they remain responsible for compliance even when relying on another entity to perform the obligation as provided by 40 C.F.R §122.35(a). Alternatively or in addition, ADEM may recognize in the permit another governmental entity (or entities) as having responsibility under its NPDES permit to implement one or more of the minimum control measures for a particular small MS4 (or MS4s) as provided in 40 C.F.R. §122.35(b).

If EPA were issuing the permit, it would restore the removed sentence to this provision, and further clarify that permittees may rely on other entities to perform permit obligations only in accordance with the criteria of 40 C.F.R. §122.35(a), (i.e., permittees would remain responsible for non-compliance if the other entity fails to implement the permit requirement unless the other entity is a governmental entity responsible for implementing the measure for the MS4 under an NPDES permit).

### 3. Post-construction Stormwater Management

Objection based on Absence of Sufficient Controls To Address Post-Construction Stormwater Management in New Development and Redevelopment

As noted above, MS4 permits must require controls to reduce the discharge of pollutants to the MEP. One area in which Phase II MS4 permittees must develop and implement MEP-level controls is the minimum control measure for post-construction stormwater management in new development and redevelopment. Pursuant to 40 C.F.R. §122.34(b)(5), MS4s must ensure that post-construction controls are in place that prevent or minimize water quality impacts. The version of the draft permit submitted to EPA on January 14, 2010 included the following provisions which set forth reasonable and practicable requirements for post-construction stormwater management in new development and redevelopment:

- Part III.B. of the permit would have required permittees to "develop and implement in the SWMP, a plan for facilitating and increasing the use of Low Impact Development (LID)/Green Infrastructure where feasible to assist in attaining the six minimum control measures. Information on Low Impact Development (LID)/Green Infrastructure is available on the following website: <a href="http://epa.gov/nps/lid">http://epa.gov/nps/lid</a>."
- Part III.B.4.(a)(4) of the permit would have required "procedures for site plan review which are prioritized based on review criteria to address potential water quality impacts, including pre- and post-construction BMPs, as appropriate, consistent with the requirements of ADEM Admin Code 335-6-12."
- Part III.B.4.(a)(6) of the permit would have required a "procedure to ensure that the Permittee has planned for the implementation of the required postconstruction controls during the design phase of construction."

• Part III.B.5. of the permit included several provisions that would have required MS4s to: develop and implement a program to address post-construction stormwater management in new development and re-development; and document the decision process for the development of a post-construction SWMP. However, these provisions did not include a specific performance standard to minimize or prevent water quality impacts.

Based on EPA's review of the draft permit submitted on January 14, 2010, EPA issued a comment by letter dated April 1, 2010 which recommended the inclusion of a performance standard for post-construction in its permit that is at least as stringent as the requirements for soil and erosion control in Alabama regulations. As described in EPA's letter, we had understood that Alabama regulations require that runoff volume and peak velocity associated with post-project conditions should not exceed runoff volume and peak velocity associated with pre-project conditions. Although EPA had concerns with the lack of a post-construction performance standard in that draft permit, EPA did not indicate that it would object to the permit, in part in consideration of the other proposed controls that were included in the provisions cited above.

We understand and appreciate that in an effort to address EPA's comment concerning a post-construction performance standard, ADEM included the following new requirement within Part III.B.5.(a)(2) of the May 18, 2010 draft permit:

Develop and implement strategies which include a combination of structural and/or non-structural BMPs designed to ensure, to the maximum extent practicable, that the volume and velocity of pre-construction stormwater runoff is not significantly exceeded. A design rainfall event with an intensity up to that of a 2yr-24hr storm event shall be the basis for the design and implementation of post-construction BMPs.

However, the May 18, 2010 draft permit also includes significant deletions and revisions to language of the provisions cited above for Part III.B., Part III.B.4.(a)(4), and Part III.B.4.(a)(6). For example, the permit no longer includes any obligation to address compliance with post-construction BMPs at the planning/site plan review stage. EPA considers that review of post-construction measures at the site planning and site plan review stage to be an important, effective and reasonable method of controlling and reducing stormwater pollutants from new development and re-development (i.e., waiting until after construction is complete to assess a developer's plans for managing post-construction stormwater would typically be too late to implement appropriate revisions to those plans to ensure minimization of post-construction water quality impacts).

In addition, the May 18, 2010 draft permit includes revisions to Part III.B. which substantially weaken the requirements for effective post-construction stormwater controls (e.g., LID/Green Infrastructure), because instead of requiring development and implementation of a plan for facilitating and increasing the use of these effective controls, the permittees now need only "consider" using such controls. The requirement to "consider" using such controls does not ensure any actual progress in increasing the use

of LID/Green Infrastructure controls, and is inherently difficult to enforce or measure. Requiring development and implementation of a plan with objective and measurable parameters, in contrast, requires permittees to actually take steps to facilitate and increase the use of approaches to stormwater management such as those recognized by EPA and other organizations (e.g., the National Association of Clean Water Agencies, the Natural Resources Defense Council, the Low Impact Development Center, and the Association of State and Interstate Water Pollution Control Administrators)<sup>5</sup> as cost effective and environmentally preferable for managing wet weather flows to reduce pollutant loads and improve water quality.

Our objection to the absence of sufficient controls to address post-construction stormwater management in new development and redevelopment is informed by many reports and studies, including the National Research Council's recent report (NRC Report) evaluating EPA's stormwater management program. The NRC Report and other studies have identified the lack of control of the volume and velocity of stormwater from developed sites following construction as a particular area of weakness that has contributed to the degrading impacts of stormwater discharges on receiving waters. These studies and reports have further found that LID stormwater control measures, or measures that harvest, infiltrate, and evapotranspirate stormwater, are critical to reducing pollutant loading from stormwater discharges by controlling the volume and velocity of stormwater leaving the site. In light of the developing knowledge reflected in these studies and reports<sup>8</sup> regarding the importance of better controlling stormwater flows and increasing the use of LID stormwater management techniques, the improvement of postconstruction MS4 permit requirements is a particular focus of EPA's review. Many LID approaches for managing stormwater do not involve greater expense or technical challenges than traditional methods of stormwater control, such as the use of curbs, gutters, pipes and detention ponds, and these approaches are available and practicable for new development and redevelopment. EPA's objection reflects our determination that a requirement to simply "consider" LID/Green Infrastructure, for example, as opposed to developing and implementing a plan for increasing its use, does not meet the requirement in 40 C.F.R. 122.34(b)(5) that "your program must ensure that controls are in place that would prevent or minimize water quality impacts" to the MEP.

EPA has determined that the requirements for post-construction in the May 18, 2010 draft permit do not constitute adequate effluent limitations sufficient to control stormwater pollutants from new development and re-development to the MEP. By including post-construction provisions that generally lack clear, specific, measurable and enforceable performance standards, ADEM is not providing clear guidance to the MS4 permittees regarding applicable performance requirements, which does not ensure implementation of MEP level controls and undermines the enforceability of the permit.

<sup>6</sup> See http://www8.nationalacademies.org/onpinews/newsitem.aspx?RecordID=12465

<sup>8</sup> For additional studies see generally http://cfpub.epa.gov/npdes/greeninfrastructure/research.cfm

<sup>5</sup> See http://www.epa.gov/npdes/pubs/gi\_intentstatement.pdf

<sup>&</sup>lt;sup>7</sup> Examples of such measures include permeable pavements, rainwater harvesting, reverse slope sidewalks, rain gardens, vegetated roofs, roof downspout control and dispersion, soil quality BMPs, preservation of natural areas and minimization of impervious surfaces to maximize infiltration, protection of natural drainage patterns and use of vegetated swales to capture and retain runoff, and protection of riparian zones, wetlands and steep slopes.

Accordingly, the revisions to these provisions result in a permit which does not meet the requirements of Section 402(p)(3)(B) of the CWA and 40 C.F.R. §\$122.34(a) and 122.34(b)(5), and therefore is subject to objection under 40 C.F.R. §123.44(c)(1) and (7).

To address this objection, ADEM must either: (1) restore the language from the provisions in Parts III.B., III.B.4.(a)(4), and III.B.4.(a)(6) that was included in the draft permit submitted to EPA on January 14, 2010 while maintaining requirements at least as stringent as the provision in Part III.B.5.(a)(2) of the draft permit (see also additional recommendations in the "Additional Comments on Draft Permit" section on the last page of this document); or (2) develop alternative requirements that provide clear, specific, measurable and enforceable performance standards regarding the components of an effective post-construction program that must be implemented. Examples of such alternate requirements can be found in EPA's "MS4 Permit Improvement Guide" which is available on our website at: <a href="https://www.epa.gov/npdes/pubs/ms4permit improvement guide.pdf">www.epa.gov/npdes/pubs/ms4permit improvement guide.pdf</a>.

If the permit were issued by EPA, it would include language consistent with the provisions cited above from the draft permit submitted to EPA on January 14, 2010. In addition, EPA would add additional provisions requiring the implementation of LID/Green Infrastructure approaches to stormwater management. For example, EPA would include in the permit specific, enforceable language requiring the MS4s to establish and enforce minimum quantifiable standards to more closely mimic the natural hydrologic regime of the area via stormwater controls that infiltrate, evapotranspire, harvest or use stormwater from new development and redevelopment sites.

### 4. Timeframe for Full Implementation of Permit Requirements

Objection based on provisions that do not require full implementation of permit requirements until the end of the permit term

In accordance with 40 C.F.R. §122.34(a), permits for small MS4s must include requirements for development, implementation, and enforcement of stormwater management programs to reduce the discharge of pollutants from the MS4 to the MEP. In order to address this requirement, it is important that any specified timeframes within the permit associated with full implementation of a permit provision must reflect an MEP-level of control. The version of the draft permit submitted to EPA on January 14, 2010 included the following provisions which set forth reasonable and practicable timeframes for full implementation of the permit requirements:

- Part I.E.3. of the permit would have required that "[e]xisting MS4s, unless otherwise stated within this permit, should implement permit requirements within 180 days of the effective date of coverage. New MS4s, unless otherwise stated within this permit, should implement permit requirements within 365 days of the effective date of coverage."
- Part III.A.1.(b) of the permit would have required that "[p]ermittee(s) shall begin
  implementation of the terms and conditions of this permit as soon as the effective

date of permit coverage, and shall meet the deadlines and schedules established in this Permit and in SWMP."

The provision in Part I.E.3. described above is not included in the May 18, 2010 draft permit, and the provision in Part III.A.1.(b) has been revised to require that "[p]ermittee(s) shall begin implementation of the terms and conditions of this permit as soon as the effective date of permit coverage, as full implementation is required within five (5) years."

As a result of these revisions, the permittees would not be obligated to fully comply with any requirements of the permit until the end of the permit term. The lack of any obligation to fully meet all permit requirements until the end of the permit term, particularly the six minimum control measures included in Part III. of the permit, removes an obligation for the permittees to reduce the discharge of pollutants from the MS4 to the MEP. Furthermore, already-permitted MS4s should have already developed and implemented controls to meet the requirements of the previous permit so they would not need an additional permit term to complete the requirements in this current draft permit. While 40 C.F.R §122.34(a) allows for the permitting authority to "specify a time period up to 5 years from the date of permit issuance" to develop and implement a stormwater management program, EPA explained that this timeframe is allowed for the first permit. As this would be the second small MS4 general permit to be issued by ADEM, there is no basis for allowing five years to comply with the terms and conditions of the permit, particularly for already-permitted MS4s. Accordingly, the provisions concerning allowable timeframes for full implementation of permit requirements results in a permit which does not require controls to reduce the discharge of pollutants to the MEP, as required by Section 402(p)(3)(B) of the CWA and 40 C.F.R. §122.34(a), and therefore is subject to objection under 40 C.F.R. §123.44(c)(1) and (7).

To address this objection, ADEM must either (1) restore provisions in the permit consistent with the language from Parts I.E.3. and III.A.1.(b) of the version of the draft permit that was submitted to EPA on January 14, 2010, or (2) if there are any specific requirements of the permit that cannot practically be fully implemented within the timeframes set forth in Part I.E.3., ADEM could include an alternate timeframe for such requirements along with supporting justification. If the permit were issued by EPA, it would include provisions with requirements consistent with the language from Parts I.E.3. and III.A.1.(b) of the version of the draft permit that was submitted to EPA on January 14, 2010.

<sup>9</sup> See Federal Register 68762, Dec. 8, 1999.

### II. Additional Comments on Draft Permit

- 1. As stated earlier, EPA acknowledges ADEM's inclusion of a performance standard for post-construction within Part III.B.5.(a)(2) of the draft permit. EPA recommends that this provision be strengthened in terms of clarity and specificity as follows:
  - We recommend the term "significantly" should be removed from this
    provision (i.e., "...the volume and velocity of pre-construction stormwater
    runoff is not significantly exceeded.").
  - We recommend that ADEM require that permittees not only "develop and implement strategies" for ensuring that the volume and velocity of preconstruction stormwater runoff is not exceeded, but also establish and enforce, through ordinance or other regulatory mechanism, an enforceable standard of flow control.
- 2. The draft permit that was submitted on January 14, 2010 included the following requirement in Part I.E.4., which has been removed from the May 18, 2010 draft permit: "Each Permittee shall provide and maintain adequate finance, staff, equipment, and support capabilities to implement the SWMP and meet all requirements, except as allowed under Part II.A.2 of this permit. This must be documented and reported within the annual report." We recommend that ADEM include this requirement in the permit.
- 3. EPA recommends that ADEM provide clarification of the requirements in Part II.B.3(a)2, for situations where multiple watersheds are within the MS4's jurisdiction. Specifically, we recommend the term "watershed" should be replaced with "watersheds."
- 4. EPA recommends that ADEM revise the following provisions in Part IV.D. of the permit to provide additional clarity regarding the requirements to implement appropriate controls with respect to discharges to impaired waters:
  - We recommend that ADEM add the following language to Part IV.D.1.: "Alabama's section 303(d) list of impaired waters can be accessed at: <a href="http://www.adem.state.al.us/programs/water/303d.cnt">http://www.adem.state.al.us/programs/water/303d.cnt</a>. EPA approved TMDLs and EPA developed TMDLs can be accessed at: <a href="http://www.adem.state.al.us/programs/water/approvedTMDLs.htm">http://www.adem.state.al.us/programs/water/approvedTMDLs.htm</a>."
  - We recommend ADEM include additional language in Part IV.D.2.(g) of the permit, consistent with the following underlined statements: "If a TMDL contains requirements for control of pollutants from the MS4 storm water discharges, then the SWMP must include BMPs specifically targeted to achieve the wasteload allocations prescribed by the TMDL. The MS4 is required to implement BMPs and other appropriate controls to achieve applicable wasteload allocations. A monitoring plan to assess the effectiveness of the BMPs in achieving the wasteload allocations must also be included in the SWMP. Implementation of the monitoring plan in accordance with Part V.A.2 shall be conducted and will determine whether the storm water controls are adequate to meet the TMDL allocations."





#### UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

REGION 4 ATLANTA FEDERAL CENTER 61 FORSYTH STREET ATLANTA, GEORGIA 30303-8960

JAN 2 7 2016

Mr. Jeff Kitchens Chief, Storm Water Management Branch Water Division Alabama Department of Environmental Management P.O. Box 301463 Montgomery, Alabama 36130-1463

Subject: Review of Draft NPDES General Permit For Discharges to Waters

of the State of Alabama Associated With Construction Activity

General Permit No. ALR100000

Dear Mr. Kitchens:

Thank you for the opportunity to review the draft National Pollutant Discharge Elimination System General Permit for discharges to waters of the State of Alabama associated with construction activity (General Permit). We received the revised General Permit via electronic submission from your office on December 14, 2015, and the draft General Permit was public noticed on December 23, 2015. Per the Memorandum of Agreement (MOA) between the State of Alabama and the U.S. Environmental Protection Agency Region 4, we have completed our review and are providing detailed comments in the enclosed document. The comments are divided into two parts. Part A lists substantive requested amendments to the General Permit and Part B lists comments/clarifications for your consideration.

Please note, per Sections IV.B.6.a. and c. of the MOA, we are afforded the opportunity to perform an additional review prior to the General Permit issuance, if the State proposes to issue a permit which significantly differs from the General Permit that the EPA reviewed, or if significant comments objecting to the General Permit have been presented at a hearing or in writing pursuant to the public notice. Otherwise, please send us a copy of the final General Permit when issued.

If you have any questions, please contact Kacy Sable of my staff at (404) 562-9346.

Christopher B. Thomas, Chief

Sustainable Communities and Watersheds Branch

Enclosure

### Part A. EPA requests the following substantive amendments to the General Permit:

### Effluent Guidelines (Part 2.3.3.4.)(page 26) - Wastewaters from washout and cleanout.

- Part I.C.4.(page 4). Please *remove* the phrase below in bold font. These discharges are prohibited unless managed by appropriate controls specified in the effluent guidelines (Part 2.3.3.4).
  - 4. Wastewater from washout and cleanout of stucco, paint, from release oils, curing compounds and other construction materials, unless managed by appropriate controls as determined by the Department;
- Part III.D.1.(page 10). Please add the language below in bold font to ensure the specific control requirements are included in the General Permit provisions.
  - 1. Minimize the discharge of pollutants from equipment and vehicle washing, wheel wash water, concrete washout, and other wash waters. Wash waters must be treated in a sediment basin or alternative control that provides equivalent or better treatment prior to discharge. The sediment basin or alternative control must be leak-proof and designed so that no overflows can occur due to inadequate sizing or precipitation. If a sediment basin is installed, one of the design requirements is to provide storage for either (1) the calculated volume of runoff from a 2-year, 24-hour storm, or (2) 3,600 cubic feet per acre drained. For more information, please refer to the Federal NPDES General Permit for Discharges from Construction Activities, Appendix H 2-Year, 24-Hour Storm Frequencies.

### Effluent Guidelines (Part 2.1.2.3.)(page 14) - Minimize sediment track-out.

Part III.A.10.(page 8). Please add the language below in bold font to the General Permit.

The Permittee shall design, install, and maintain effective erosion controls and sediment controls, appropriate for site conditions to, at a minimum:

- 10. Stabilize all construction entrances and exits; and minimize off-site tracking of sediment from vehicles. To comply with this requirement, you must:
  - a. Restrict vehicle use to properly designated exit points;
  - b. Where sediment has been tracked-out from your site onto the surface of offsite streets, other paved areas, and sidewalks, you must remove the deposited sediment by the end of the same work day in which the track-out occurs or by the end of the next work day if track-out occurs on a non-work day. You must remove the track-out by sweeping, shoveling, or vacuuming these surfaces, or

by using other similarly effective means of sediment removal. You are prohibited from hosing or sweeping tracked-out sediment into any stormwater conveyance (unless it is connected to a sediment basin, sediment trap, or similarly effective control), storm drain inlet, or surface water.

If preferred, the above language can be added instead to the below section of the General Permit.

- Part III.E.4.(o)(i).(page 12). Please add the language below in bold font to the General Permit.
  - (o) A description of procedures for:
    - (i) Sweeping or removal of sediment and other debris that has been tracked from the site or deposited from the site onto streets and other paved surfaces, including sidewalks. The procedures must include (at a minimum) the requirement that sediment tracked-out from your site onto the surface of off-site streets, other paved areas, and sidewalks, be removed by the end of the same work day in which the track-out occurs or by the end of the next work day if track-out occurs on a non-work day. The track-out must be removed by sweeping, shoveling, or vacuuming these surfaces, or by using other similarly effective means of sediment removal. You are prohibited from hosing or sweeping tracked-out sediment into any stormwater conveyance (unless it is connected to a sediment basin, sediment trap, or similarly effective control), storm drain inlet, or surface water. In addition, the procedures must include the restriction of vehicle use to properly designated exit points.

Effluent Guidelines (Part 2.3.3.3.)(page 24-26) – Storage, Handling, and Disposal of Construction Products, Materials, and Wastes.

Part III.D. 2.(page 10). Please add the language below in bold font.

The Permittee must design, install, implement, and maintain effective pollution prevention measures to minimize the discharge of pollutants. At a minimum, such measures must be designed, installed, implemented and maintained to:

- 2. Minimize the exposure of building materials, building products, construction wastes, trash, landscape materials, fertilizers, pesticides, herbicides, detergents, sanitary waste and other materials present on the site to precipitation and to stormwater.
  - a) For construction and domestic waste, provide containers (e.g., dumpster or trash receptacle) of sufficient size and number to contain construction and domestic wastes. In addition, you must:

- Clean up and dispose of waste in designated waste containers on work days; and
- ii. If containers overflow, clean up immediately.
- b) For sanitary waste, portable toilets must be positioned so that they are secure and will not be tipped or knocked over.

### Effluent Guidelines (Part 2.2.)(page 18) - Stabilization requirements.

• Part III.E.4.h.(page 11). Please add the language below in bold font.

#### The CBMPP shall include:

- (h) A description of temporary and permanent stabilization practices, including a schedule and/or sequence for implementation. For soil stabilization completion, the following must be achieved:
  - i. For vegetative stabilization, all activities necessary to initially seed or plant the area to be stabilized; and/or
  - ii. For non-vegetative stabilization, the installation or application of all such non-vegetative measures.

In addition, to be considered adequately stabilized, you must meet the criteria below depending on the type of cover you are using, either vegetative or non-vegetative.

- iii. For all sites using vegetative stabilization, except those located on agricultural lands, the requirements below apply:
  - If you are vegetatively stabilizing any exposed portion of your site through the use of seed or planted vegetation, you must provide established uniform vegetation (e.g., evenly distributed without large bare areas), which provides 70 percent or more of the density of coverage that was provided by vegetation prior to commencing earth-disturbing activities. You should avoid the use of invasive species;
  - 2) For final stabilization, vegetative cover must be perennial; and
  - Immediately after seeding or planting the area to be vegetatively stabilized, to the extent necessary to prevent erosion on the seeded or planted area, you must select, design, and install non-

vegetative erosion controls that provide cover (e.g., mulch, rolled erosion control products) to the area while vegetation is becoming established.

iv. If you are using non-vegetative controls to stabilize exposed portions of your site, or if you are using such controls to temporarily protect areas that are being vegetatively stabilized, you must provide effective non-vegetative cover to stabilize any such exposed portions of your site.

### Effluent Guidelines (Part 2.1.2.4.)(page 14) - Control discharges from stockpiled sediment or soil.

• The permit does not include conditions to control discharges from stockpiled sediment or soil. Please *add* the language below in bold font to the General Permit.

Discharges from stockpiled sediment or soil must be controlled. For any stockpiles or land clearing debris composed, in whole or in part, of sediment or soil, you must comply with the following requirements:

- a. Locate the piles outside of any natural buffers established and physically separated from other stormwater controls;
- b. Protect from contact with stormwater (including run-on) using a temporary perimeter sediment barrier;
- Where practicable, provide cover or appropriate temporary stabilization to avoid direct contact with precipitation or to minimize sediment discharge;
- d. Do not hose down or sweep soil or sediment accumulated on pavement or other impervious surfaces into any stormwater conveyance (unless connected to a sediment basin, sediment trap, or similarly effective control), storm drain inlet, or surface water; and
- e. Unless infeasible, contain and securely protect from wind.

### Part B. Comments/Clarifications:

- Part III.B.1-8.(page 9)., Part III.D.1 (a and b.)(page 10)., Part III.D.4.(page 10)., Part III.H.1.a-f.(pages 13-14), Part III.H.3.h-i.(page 15), Part III.J.3.(page 16), Part III.L.1-3.(page 16), Part IV.A.3-4.(page 18). EPA notes the addition of information in several permit requirements improving the General Permit (including those sections cited above).
- Part II.C.1.(c).(page 5). Please add the clarifying language in bold font below.

The NOI shall include:

- (c) Identification of the waterbodies or municipal separate storm sewer systems (MS4s) receiving discharges for which coverage under this general permit is desired and whether those waterbodies are listed on the 303(d) list or have a total maximum daily load (TMDL).
- Part II.C.1.(g).(page 6). Please add the additional language in bold font below.
  - (h) The number of estimated disturbed acres and total site acreage.
  - (i) The estimated start and completion dates of the project.
- Part III.A.8.(page 8). Please add the language below in bold font.

The Permittee shall design, install, and maintain effective erosion controls and sediment controls, appropriate for site conditions to, at a minimum:

- 8. Minimize the generation of dust through the appropriate application of water or other dust suppression techniques.
- Part III.E.4.(g.)(page 11). Please remove the language in bold font below.

The CBMPP shall include:

- (g) A detailed description of special controls needed to prevent or eliminate discharges of sediment and other pollutants of concerns from priority construction sites, to the maximum extent practicable;
- Part III.H.3.(a)(ii).(page 14). Please remove the language in bold font below.
  - (ii) Pollutant discharges are being prevented/minimized to the maximum extent practicable, and
- Part III.H.3.(g).(page 15). Please add the language in bold font below.
  - (g) The inspection shall be recorded in a written format acceptable to the Department, with BMP deficiencies as well as discharges of pollutants and sediment from the site documented in photographs.
- Part III.I.1.(page 15). Please add the language in bold font below.

- 1. Any poorly functioning erosion controls or sediment controls, non-compliant discharges, or any other deficiencies observed during the inspections required under Part III.G.2 shall be corrected as soon as possible, but not to exceed five (5) days of the inspection unless prevented by unsafe weather conditions. If unsafe weather conditions are present, they should be documented.
- Part III.K.(page 16). Please add the language in bold font below.

The Permittee shall measure and record all precipitation occurring at the construction site (including rainfall and snowfall). Precipitation measurements shall be taken using continuous recorders, daily readings of an onsite rain gauge, daily readings of an offsite precipitation gauge located adjacent to or in close proximity (maximum 1 mile distance) to the facility, or by other measurement devices acceptable to the Department (e.g. online resources). Precipitation measurements must be representative of the Permittee's site.

• Part IV.T.(page 22). Please add the language in bold font below.

The Permittee shall post and maintain sign(s) at the front gate/entrance, and if utility installation, where project crosses paved county, State, or federal highways/roads, and/or at other easily accessible location(s) to adequately identify the site prior to commencement of and during NPDES construction until permit coverage is properly terminated. Such sign shall display the name of the Permittee, "ADEM NPDES ALR10" followed by the five digit NPDES permit number, facility or project name, facility or project contact telephone number, and other descriptive information deemed appropriate by the Permittee.





# UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

REGION 4 ATLANTA FEDERAL CENTER 61 FORSYTH STREET ATLANTA, GEORGIA 30303-8960

SEP 2 8 2012

Mr. Lawrence W. Hedges Manager, Nonpoint Source Program Georgia Environmental Protection Division 4220 International Parkway, Suite 101 Atlanta, Georgia 30354

Subject: National Pollutant Discharge Elimination System

General Permit No. GAG610000 Draft Phase II MS4 Comments

Dear Mr. Hedges:

Thank you for the opportunity to review the draft Phase II Municipal Separate Storm Sewer System (MS4) General National Pollutant Discharge Elimination System (NPDES) Permit No. GAG610000. We received the draft permit dated June 15, 2012, on June 18, 2012.

Per the Memorandum of Agreement between the State of Georgia and U.S. Environmental Protection Agency Region 4, we have completed our review and are providing detailed comments for your consideration in the enclosed document. Overall, the draft Georgia Phase II permit represents a significant step forward in the progress of Georgia's NPDES MS4 permitting program. However, we respectfully request that the Georgia Environmental Protection Division further strengthen the permit in the manner described in our comments.

If you have any questions, please contact Christine McKay of my staff at (404) 562-9412.

Sincerely,

Christopher B. Thomas, Chief

Pollution Control and Implementation Branch

Water Protection Division

Enclosure

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### Environmental Protection Agency Region 4 Comments on Georgia's Phase II MS4 General NPDES Permit No. GAG61000

### Comment 1

### Part 4. Storm Water Management Program, pg. 6

Suggest revising the first paragraph in this section from "The SWMP and its amendments, upon approval by EPD, shall become part of this permit." to "The SWMP and its amendments, upon approval by EPD, shall become *an enforceable* part of this permit."

#### Comment 2

### Part 4. Storm Water Management Program, pg. 6

This comment is applicable to several parts of the permit and applies to both existing and new permittees. We recommend that the permit be revised to require an annual process to evaluate program components and revise them to increase their effectiveness. We recognize that the revising 4.1.1 below will affect other subsections; however, we think that including the language at other places where the same point applies would be useful, as listed below.

### Part 4.1 Requirements, pg. 7

Add a requirement (4.1.5): On an annual basis, evaluate, update and revise the Best Management Practices for each Minimum Control Measure to improve their effectiveness.

# Table 4.2.1(a)&(b) Public Education – Best Management Practices (BMPs) (Existing and New Permittees), pgs. 7 & 8

1.a: Suggest revising from "Continue to implement, and revise if necessary, the stormwater education program contained in the SWMP." to "Continue to implement, and on an annual basis, evaluate and revise to increase the effectiveness of the stormwater education program."

# Table 4.2.2(a)&(b) Public Involvement/Participation – BMPs (Existing and New Permittees), pgs. 8 & 9

1.a: Suggest revising from "Continue to implement, and revise if necessary, the public involvement/participation program contained in the SWMP." to "Continue to implement, and on an annual basis, evaluate and revise to increase the effectiveness of the public involvement/participation program contained in the SWMP."

# Table 4.2.3(a)&(b) Illicit Discharge Detection and Elimination (IDDE) - BMPs (Existing and New Permittees), pgs. 10-12

4.2.3(a) 5.: Suggest adding 5.c. "On an annual basis, evaluate and revise to increase the effectiveness of the Complaint Response process."

Add a requirement (4.2.3(a)6.) Annual Evaluation and Revision: On an annual basis, evaluate, update and revise the IDDE BMPs to improve their effectiveness.

# Table 4.2.4(a)&(b) Construction Site Storm Water Runoff Control - BMPs (Existing and New Permittees), pgs. 15 & 16

4.2.4(a)2.: Suggest adding 2.c. On an annual basis, evaluate, update and revise the site plan review procedures to improve their effectiveness.

Add a requirement (4.2.4(a)7.): Annual Evaluation and Revision: On an annual basis, evaluate, update and revise the Construction Site Storm Water Runoff Control procedures to improve their effectiveness.

Add a requirement 4.2.4(a)8.: On an annual basis, evaluate and revise the enforcement procedures in the SWMP, the Enforcement Response Plan (ERP), Complaint Response and existing Erosion and Sediment Control (E&S) ordinances to ensure consistency between the parts and update and revise to improve effectiveness.

### Table 4.2.5(a)&(b) Post Construction – BMPs (Existing and New Permittees), pgs. 21-25

Add a requirement (4.2.5(a)6.): Annual Evaluation and Revision: On an annual basis, evaluate, update and revise the Post Construction procedures to improve their effectiveness.

# Table 4.2.6(a)&(b) Pollution Prevention/Good Housekeeping for Municipal Operations - BMPs (Existing and New Permittees), pgs. 26-29

Add a requirement (4.2.6(a)10.): Annual Evaluation and Revision: On an annual basis, evaluate, update and revise the Pollution Prevention/Good Housekeeping for Municipal Operations procedures to improve their effectiveness.

#### Comment 3

#### 4.2.1 Public Education and Outreach on Storm Water Impacts, p. 7

Add a description of minimum education components for a MS4's stormwater program. Public education and outreach should require minimum provisions to help community residents understand:

- Why MS4 stormwater is regulated impacts of traditional methods of stormwater management;
- Where, when and why flooding occurs in their community;
- What no adverse impact means with development and re-development;
- How stream buffers protect aquatic ecological processes;
- New approaches to storm water to incorporate stormwater "green infrastructure" practices and how they benefit them environmentally, socially (public health) and economically;

#### Comment 8

### 4.2.3(a)&(b) 5 Illicit Discharge Detection and Elimination – Complaint Response, pgs. 11 & 13

In several points in the permit, where information is received and investigated, we request that you add a requirement to *track the status as it moves through the required steps*.

#### Comment 9

### 4.2.3(a)&(b) 5 b Illicit Discharge Detection and Elimination - Complaint Response, pgs. 11 & 13

In several points in the permit, an annual report is required. We request that the permit be more specific on what is to be reported. The annual report should include the date of the complaint, type of complaint, dates of interim steps, outcome of complaint, etc.

### Comment 10

### 4.2.3.6 Illicit Discharge Detection and Elimination, pg. 18

We acknowledge the EPD for encouraging all Phase II MS4s to inventory and inspect industrial and commercial facilities to help identify illicit discharges and the potential for pollution in storm water from these facilities. However, stronger, more specific requirements should be considered especially in Phase II communities with significant industrial or commercial activity.

### Comment 11

# Table 4.2.4(a)&(b) Construction Site Storm Water Runoff Control 4.a Enforcement Procedures and 5.b. Complaint Response, pgs. 15 & 16

Include in the annual report the status and tracking of enforcement actions. Whether it is closed, still open, the time table, etc.

#### Comment 12

# Table 4.2.4(a)&(b) Construction Site Storm Water Runoff Control 4.a Enforcement Procedures and 5.b. Complaint Response, pgs. 15 & 17

5. a: Adoption of Complaint Response Element requirements should be required within a shorter time frame than specified.

#### Comment 13

#### 4.2.5.1 Stormwater Design Manual, pg. 19

The statement that the "permittee shall ensure that the following minimum standards shall be considered during the site plan preparation process" is too loose, it is a requirement. Instead of "considered" – the permit should require that "these standards shall be implemented where practicable."

- Proper use of storm drains to avoid misuse of these systems (i.e., homeowners sweeping leaves
  into storm drains or disposing their used motor oil into them);
- How to identify dry weather discharges and IDDE issues;
- The community's complaint process and escalating enforcement processes, i.e., Enforcement Response Plan;
- Erosion and sediment control requirements at construction sites and harm caused by allowing erosion; and,
- Their community streams' water quality conditions relative to "swimmable and fishable."

Without greater public understanding of the reasons why stormwater is regulated and the benefits resulting from these regulations, how will public support and adherence to these regulations be achieved? The permit should provide specific minimum public education requirements.

### Comment 4

### 4.6.1 Storm Water Management Program Modifications, pg. 34

Define what EPD considers a substantial modification to the SWMP or change the word substantial to "any" in order to clarify re-submittal requirements for EPD approval of SWMP modifications. Suggest changing from "Written notification of substantial modifications must be submitted and EPD approval..." to "Written notification of any modifications must be submitted and EPD approval..."

### Comment 5

## 4.2.2 Public Involvement/Participation, pg. 8

In addition to requiring compliance with State and local public notice requirements when implementing the MS4s public involvement/participation program, require that the MS4s post their SWMPs on their county and municipal websites for access by the public. This would address EPA's concern with the adequacy of public participation procedures for the contents of the SWMPs which are an enforceable component of the permit.

### Comment 6

### 4.2.3.5 Illicit Discharge Detection and Elimination, pgs. 9 & 10

Regarding the list of non-stormwater discharges, in addition to chlorinated swimming pools, add salt water swimming pools.

### Comment 7

# 4.2.3(a)&(b) 3.e. Illicit Discharge Detection and Elimination, pgs. 10 & 12

Provide a specific time frame within which any identified illicit discharge will be eliminated. If discharges are not resolvable within the specified time frame, a rationale for additional time and a schedule to come into compliance should be required.

### Comment 14

### 4.2.6(a)&(b) Pollution Prevention/Good Housekeeping for Municipal Operations, pgs. 27&29

9.a.: There is no requirement to update the municipal facility inventory after the submittal of the inventory on February 2014. The permittee could have a change of facilities that could substantially impact the MS4. Include a requirement to update the inventory annually. Also, there is no requirement to schedule a review of the municipal programs or how to address a violation found at a municipal facility.

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#### UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

REGION 4
ATLANTA FEDERAL CENTER
61 FORSYTH STREET
ATLANTA, GEORGIA 30303-8960

OCT 2 3 2009

Sandra Gruzesky, Director Division of Water Kentucky Department for Environmental Protection 200 Fair Oaks Lane Frankfort, KY 40601

Dear Ms. Gruzesky,

Thank you for the opportunity to review Kentucky's draft general permit for stormwater discharges associated with small municipal separate storm sewer systems (MS4s) (KYG200000). The U.S. Environmental Protection Agency (EPA), Region 4 has completed its review of the draft permit, first received by our office via electronic notification on July 23, 2009, and we are providing comments per the Memorandum of Agreement (MOA) between the Commonwealth of Kentucky and EPA Region 4.

We commend the Commonwealth for including clear performance requirements in the draft permit with regards to post-construction stormwater management for new development. We strongly encourage you to maintain these requirements in the final permit. As described in the enclosed comments, for certain other areas of the permit we recommend a greater level of specificity to clarify the performance expectation for the permittees. In addition, our comments include questions and recommendations based on our review of statements in the fact sheet relating to antidegradation.

Based on communications between our staff, we understand that Kentucky Division of Water (KDOW) plans to address significant comments received from EPA and the public as part of the finalization of this permit. Prior to the issuance of the final permit, we request that Kentucky provide EPA an opportunity to review the "proposed permit," as requested by Section IV.B. of the MOA.

If you have any questions, please feel free to contact Mary Kuo of my staff at (404) 562-9847.

Sincerely,

James D. Giattina

Director

Water Protection Division

Enclosure

# EPA COMMENTS ON KENTUCKY'S DRAFT GENERAL PERMIT FOR SMALL MS4S

### I. Proposed Permit

Illicit Discharge Detection and Elimination (Part II.B.3). The addition of more detail would clarify the level of performance necessary to achieve compliance with the terms and provisions of the permit.

- 3.a. Current MS4 programs are not given a date certain for implementing and enforcing an IDDE ordinance although newly-designated MS4s are. We recommend clarifying or explicitly stating that current MS4s programs comply with this requirement upon issuance of the permit.
- 3.e. Existing permittees were required to develop a storm sewer system map showing the location of all outfalls under the conditions of the current permit (Part I.A.3.ii.), and so this information should already be available for reporting purposes. We recommend the permit include a requirement for MS4s covered by the current permit to include this information in the annual report for Year 1 of the proposed permit.
- 3.f. We recommend the permit include more explicit requirements in identifying milestones or the minimum level of dry-weather screenings. As an example: 20% of the major outfalls per year, with all the outfalls being addressed within the permit term. In addition, we recommend that the permit could require follow-up investigations within a specified timeframe when information resulting from such screenings, inspections, or citizen complaints indicates reason to suspect an illicit discharge.
- Please specify that illicit discharge ordinances should include the authority to compel cessation of illicit discharges as soon as possible; and require the submission for approval, and implementation, of a plan and schedule for the elimination of such discharges when it will take longer than \_\_\_\_ (e.g., 10) days.

Construction Site Stormwater Runoff Control (Part II.B.4). Similar to our comments on Part II.B.3, the addition of more detail would clarify the terms of permit compliance.

4.a. It is not clear as to whether or not current MS4s are expected to already have
ordinances in place. If this is the case, 24 months could be a long time for an
existing MS4 program to implement and enforce such ordinance/other regulatory
mechanism. We recommend clarifying or explicitly stating the timeline for
current MS4s to comply with this requirement.

- <u>4.a.</u> Among other enforcement authorities, the ordinance could also specify that it will include stop-work authority and consider a specific dollar amount penalty per day authority (e.g., a penalty authority of at least \$--- per violation per day).
- 4.b.ii. We recommend this provision be revised to include an explicit level of effort requirement, such as a percentage and/or timeframe for inspection (rather than "periodic"). For example: all active sites monthly and all new sites within 2 weeks after initiation of land disturbance, or within \_\_\_ days of citizen complaints and a requirement to establish a hotline for reporting construction and other stormwater problems, etc.

We recommend specifying that only inspections conducted by appropriately trained staff (trained in construction erosion and sediment, plan reviews, and BMP implementation) will count towards minimum inspection frequency requirements.

- <u>4.b.iii.</u> We recommend the inclusion of escalating enforcement remedies in the referenced enforcement strategy.
- <u>4.b.iv.</u> We recommend the following change: A procedure must be developed to ... and prioritize identify sites for inspection.

Post-Construction Stormwater Management in New Development and Redevelopment (Part II.B.5). We commend KY DOW on a much improved post-construction section over the current permit, particularly with respect to a clear performance standard regarding capturing rainfall. As you know, prior planning and design for the minimization of pollutants in post-construction stormwater discharges is an effective approach to stormwater quality management. Therefore, with the requirements as proposed, EPA feels that MS4 communities will be better able to address stormwater discharge issues in new and redeveloped areas over the long run. The permit's inclusion of green infrastructure considerations also supports this goal.

Pollution Prevention/Good Housekeeping for Municipal Operators (Part II.B.6). Similar to our comments above, we recommend more specificity in terms of the level of performance necessary to achieve compliance with the terms and provisions of the permit. For example, we recommend that subsection a. should clarify the timeframes for full implementation for new MS4s and existing MS4s. In addition, we recommend striking the term, "as appropriate" from the first sentence of subsection c. as it implies that the stated requirements may not be necessary.

TMDLs and Impaired Waters (Part II.D). EPA is pleased to see that the permit includes additional requirements for waters with an approved TMDL or identified as being impaired on Kentucky's Section 303(d) list. However, we recommend that some of the requirements already specified as part of the stormwater quality management plan be included in the permit itself.

- <u>D.1.</u> We recommend that the reference to a "reasonable timeframe" be clarified in terms of months/years.
- <u>D.2</u>. We recommend that Kentucky include language to clarify that the requirements of this section are applicable for TMDLs established prior to the effective date of the permit.
- <u>D.3.</u> We are encouraged to see post-TMDL monitoring requirements as part of the permit. Over the long term, the resulting data and information will not only help in the evaluation of BMP effectiveness, but it may also be used to refine future TMDLs and WLAs.
- <u>D.4.</u> Permittees should be required to identify impaired waters into which the MS4 discharges. Resulting listings, as well as the permittees' evaluation of its BMPs in light of such impairments, should be included in the SWQMP. At a minimum, this information should be updated in the annual report following the finalization of Kentucky's Section 303(d) list of impaired waters (every two years).

**Development of an MS4 Program Monitoring Plan (Part II.E).** In addition to the listed elements of an effective monitoring plan, we recommend that the permit include a specification of the flow regimes under which monitoring should be conducted.

**Fiscal Requirements (Part II.G.).** We recommend that this provision include additional language to clarify that the permittees should annually report their accounting of stormwater-related budgets, costs, and staffing resources.

#### II. Fact Sheet: Antidegradation

Based on our review of the language you included in your Fact Sheet with respect to antidegradation, we have the following questions and comments:

- The statements in the Fact Sheet should be consistent in presenting KDOW's
  conclusion as to how the permit complies with requirements for high quality
  waters: Is it: (1) significant lowering of water quality will be prevented, or (2)
  permanent lowering of water quality will not occur? If KDOW believes those
  two conclusions to be the same, the Fact Sheet should say that as well.
- If compliance with high quality waters requirements is based on prevention of "significant" lowering of water quality, KDOW should provide additional explanation as to how the permit complies with a requirement(s) of KAR 10:030 in relation to high quality waters, since the terms "significant lowering of water quality," or "significant degradation" are not terms that are used in the regulation.

- This draft permit contains the same language in the purpose section as the language that EPA specifically asked the State to clarify in Kentucky's draft Fact Sheet for the KYR10 general permit for construction stormwater (i.e., "The process for making a determination of whether water quality will be lowered in these waters to a level that would interfere with existing or designated uses is what is commonly known as 'Tier 2 review.'"). KDOW did not make the changes that EPA requested to that Fact Sheet and did not provide an explanation of KDOW's position on this statement in relation to the revised antidegradation methodology adopted during the triennial review. Is it KDOW's opinion that a demonstration of socioeconomic necessity and importance allows lowering of water quality to the criteria levels established for applicable uses for the receiving waters? If so, this is contrary to the position taken by KDOW staff in telephone conversations over the past several months on the recent KAR 10:030 rulemaking process. We ask that KDOW clarify the State's position on this issue in writing as a revision to statement in the Fact Sheet for this draft general permit, and in writing to EPA as a part of the submittal of the new and revised standards adopted during the recent triennial review.
- The Fact Sheet states that an individual permit will be required "where implementations of the technology-based requirements in this permit will not be sufficient to protect the applicable water quality standards for the receiving water ..." We request you include additional information in the fact sheet that would clarify: who will make that decision, what decision criteria/factors will be used, and at what point(s) in the permit issuance process will this decision be made?

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#### UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

REGION 4
ATLANTA FEDERAL CENTER
61 FORSYTH STREET
ATLANTA, GEORGIA 30303-8960

JUN 2 3 2016

Mr. Peter Goodmann Director, Division of Water Kentucky Department for Environmental Protection 300 Sower Boulevard Frankfort, Kentucky 40601

Dear Mr. Goodmann:

Thank you for the opportunity to review Kentucky's draft general permit for stormwater discharges from small municipal separate storm sewer systems (MS4s) (Permit No. KYG200000). The U.S. Environmental Protection Agency Region 4 has completed its review of the draft permit, first received by our office via electronic notification on April 11, 2016, and we are providing comments per the Memorandum of Agreement (MOA) between the Commonwealth of Kentucky and the EPA Region 4.

For context of the environmental importance of this MS4 permit for small municipalities, the EPA notes the Kentucky Division of Water's (KDOW) most recent 305(b) report documenting approximately 24 percent of Kentucky's streams and rivers having been assessed, and of those assessed, approximately 66.8 percent are impaired. Urban-related runoff/stormwater is one of the top sources of impairment, causing close to 948.1 miles of streams and rivers to not meet their designated uses. (Ref: https://ofmpub.epa.gov/waters10/attains\_state.control?p\_state=KY&p\_cycle=2012). Given the significant impacts of urban stormwater runoff on instream water quality in Kentucky, it is crucial that KDOW's general permit for discharges from small MS4s fully meets the requirements of Section 402(p) of the Clean Water Act (CWA), to include controls which reduce the discharge of pollutants to the maximum extent practicable, and provide protection of receiving waters as expected and required by the CWA.

In comparing the draft general permit to the existing general permit, the EPA is extremely concerned about the wholesale deletion of many specific permit requirements from the existing 2010 permit. KDOW has removed a substantial number of conditions and details that helped make Kentucky's existing permit requirements clear, specific, and measurable and has significantly weakened the permit through the lack of specificity. Permit requirements which were clear are now less stringent and vague. The extensive changes make it difficult for the EPA to make point-by-point specific comments. This comment letter will instead provide general observations and comments.

The need for clear, specific and measurable permit requirements is a fundamental requirement of federal law. The CWA requires that MS4 permits "require controls to reduce the discharge of pollutants to the maximum extent practicable (MEP)." When permit provisions are vague, or leave it to the permittee to

determine what control measures will be chosen and implemented, the permit fails to ensure that required controls will reduce the discharge of pollutants to the MEP. Accordingly, it is the permitting authority's responsibility to establish clear, specific and measureable requirements that it determines to be components of an MEP-level MS4 program.

In addition, the CWA requires that the public be afforded an opportunity to participate in the development of permit conditions. When a permit includes only vague requirements and improperly empowers permittees to make their own determinations of MEP-level controls, the public is deprived of the opportunity to participate in and make informed comments regarding the development of permit requirements. Moreover, clear, specific and measurable requirements ensure that the permit will be enforceable and the permittee accountable for compliance. Without these requirements, permittees are left without certainty or clarity as to their compliance obligations and the objectives of the permit may not be achieved.

With each iteration of permit issuance, the EPA expects states to make improvements to their MS4 permits to reflect specific and up-to-date information and to reflect the progress of permitted MS4s in the development of their stormwater management programs. Instead, by removing numerous requirements that were included in the existing permit, KDOW's draft permit appears to constitute a regression in stringency and effectiveness. Further, KDOW has not provided any information demonstrating that the reduced stringency does not violate the prohibition against backsliding in 40 Code of Federal Regulations (C.F.R.) § 122.44(l). KDOW has not provided information in the Fact Sheet that explains how the significantly weakened permit still constitutes a permit which meets KDOW's obligation to require controls that reduce the discharge to the MEP.

One respect in which the permit has been substantially weakened is in the area of Total Maximum Daily Load (TMDL) implementation. Almost all of the specific requirements related to TMDL implementation that were contained in the existing permit have been removed from the draft permit. The removal of these provisions appear to violate the regulatory requirement at 40 C.F.R. § 122.44(d)(1)(vii)(B) to include effluent limits that are "consistent with the assumptions and requirements of any available wasteload allocation for the discharge."

The language in the existing permit established MEP for the covered municipalities. The existing permit is being implemented by small MS4s in Kentucky. KDOW must restore the language and requirements of the existing permit in the final permit in order to meet the cited regulatory requirements. Alternatively, KDOW must explain how the permit still represents the MEP controls, why the requirements of the existing permit are no longer considered MEP, and how the permit does not violate anti-backsliding requirements despite the significant weakening of the permit.

We understand that KDOW has received significant comments objecting to the draft permit and could propose to issue a permit that significantly differs from the draft permit as reviewed by the EPA. In either case, Kentucky is required to provide the EPA an opportunity to review the "proposed permit" prior to

issuance of a final permit pursuant to Section IV.B.6. of the MOA. Please provide a copy of the final proposed permit, along with the comments received by KDOW on the draft permit and KDOW's responsiveness summary to those comments.

If you have any questions, please feel free to contact Ms. Mary Kuo of my staff at (404) 562-9847.

Sincerely,

ames D. Giattina

Director

Water Protection Division

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# UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

REGION 4
ATLANTA FEDERAL CENTER
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ATLANTA, GEORGIA 30303-8960
FEB 2 6 2015

Mr. Harry Wilson
Director
Environmental Permits Division
Mississippi Department of Environmental Quality
P.O. Box 2261
Jackson, Mississippi 39225

Subject: Draft National Pollutant Discharge Elimination System Permit for

Phase II General Permit Municipal Separate Storm Sewer Systems

Dear Mr. Wilson:

Thank you for the opportunity to review the preliminary draft National Pollutant Discharge Elimination System (NPDES) Phase II General Permit for small and medium municipal separate storm sewer systems (MS4s) in Mississippi, which we received via electronic submission from your office on December 2, 2014. Per the Memorandum of Agreement between the State of Mississippi and the U.S. Environmental Protection Agency Region 4, we have completed our review and are providing detailed comments for your consideration in the enclosed document.

Overall, the revised draft MS4 permit represents a significant step in the progress of Mississippi's NPDES stormwater program. The EPA applauds the Mississippi Department of Environmental Quality for strengthening the Illicit Discharge and Detection Elimination element in the draft permit and for including numerous references to the Mississippi Handbook for Erosion Control, Sediment Control and Stormwater Management on Construction Sites and Urban Areas. In meeting the EPA's level of expectations and to be consistent with the regulatory requirements, it is necessary to provide additional details and permit language in the draft permit. To further clarify our comments, we are including "suggested language" in some of them for you to consider including in the final permit.

We see these comments as an opportunity to develop a permit that is consistent with the Clean Water Act and protective of water quality. It is our opinion that addressing these comments will result in an MS4 permit that is more in accordance with Region 4's letter of April 15, 2010, because it will include requirements that are clear, specific, measurable and enforceable. Upon your review of the enclosed comments and supporting documents, please contact us at your earliest convenience if you would like to

discuss them. Once we resolve these topics, we request to be afforded an additional review opportunity of the permit prior to issuance. If you have any questions, please contact Chris Plymale of my staff at (404) 562-9794.

Sincerely,

Mathie Ellery Ty
Christopher B. Thomas, Chief Sustainable Communities and Watersheds Branch

Water Protection Division

#### Enclosures

1. EPA Comments on MDEQ Draft Phase II

2. EPA April 15, 2010 MS4 Expectations Letter

3. KY Phase II MS4 TMDL Language

4. TN Phase II MS4 TMDL Language

# EPA Comments on the Mississippi Department of Environmental Quality Draft Phase II MS4 General Permit Submitted to Region 4 on December 2, 2015

#### Comment #1

The Draft Permit needs a table of contents.

#### Comment #2

Page 2, ACT 2 (4) For the language "if WLA is established for a TMDL that would apply to a facility's discharge, the facility must implement steps necessary to meet that allocation." "Steps" implies that this is a gradual phase in. Is there a time period associated with the facility implementing steps to meet that allocation? We suggest adding the following sentence to the paragraph: "The MS4 should ensure that the SWMP identifies sufficient BMPs to numerically show through pollutant reduction estimates that the reductions called for by the TMDL will be achieved."

#### Comment #3

Page 5 and 6, In ACT 3, what is meant by "timely manner?" Perhaps that could be added to the definitions.

#### Comment #4

Page 7, ACT 4, item 5 regarding MS4 NOI requirements, change to "A list of receiving waters with approved or established TMDLs and receiving waters on the latest Mississippi 303(d) list of impaired waters." Include a link for TMDLed waters also.

#### Comment #5

Page 7, Change ACT 4 S-2 (6) add: it is the regulated entity's responsibility to "correct these failures" to assure compliance.

#### Comment #6

General comments that apply throughout. We suggest that the permit include a separate TMDL Section in addition to the separate TMDL references in the draft permit, which we have provided comments on (numbers 2, 4, 7, and twenty five). According to the enclosed MS4 Expectations Letter, the permit should contain provisions that require MS4s to determine their discharge contributions to any approved or established TMDL. The permit should include clear and specific selection and implementation of BMPs and have a feedback mechanism to evaluate progress, including adaptive management if plans are not demonstrating progress toward achieving WLAs. The permit should also require monitoring or assessment of BMP performance to assess load reductions and to determine if additional BMPs are required to address and applicable WLAs. We have included examples of TMDL language in the enclosed excerpts from the Kentucky and Tennessee Phase II MS4 Permits.

The permit should identify timeframes or milestones in association with the program development and implementation so that compliance can be evaluated. This should include timeframes for programs addressing TMDLs and for developing and implementing the Phase II

MS4 six minimum measures. For example, within 12 months of permit coverage, the permittee shall "develop, implement, and enforce a program to address stormwater runoff from publiclyowned new development and redevelopment projects..."

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#### Comment #7

Page 9, ACT 5 SWMP Development: The 2nd paragraph sentence should not end with the words "for each subsequent permit." It implies that BMP adjustments should happen only every five or more years when the permit is reissued. We feel these adjustments should be iterative and ongoing, at a minimum annually. The sentence should end with the words "in an ongoing, iterative or annual interval." We suggest the following language for the next sentence: "For TMDLed waters, the SWMP should identify sufficient BMPs to numerically show, through pollution reduction estimates, that load reductions called for in the TMDL will be achieved."

#### Comment #8

Page 11, ACT 5 (1) (A) should read "Implement, update and revise as necessary..."

#### Comment #9

Page 12, ACT 5 (2) should read "the regulated entity shall develop, implement, update and revise as necessary..."

#### Comment #10

ACT 5 (3) (A) should read "Develop, Implement, update and revise," .... and enforce...

#### Comment #11

Page 13, ACT 5 (3) (B). Although the addendum mentions it, we did not find additional language which specifically recommends the use of identifiers for outfalls here (identifiers are, however, mentioned in ACT 5 (3) (G) (4) on page 15). Although Act 5 (3) (B) mentions that an electronic format "can be useful," we feel that using GPS and GIS during the mapping process should be strongly recommended. If the MS4 cannot accomplish this, they should at least provide a reason. Especially since MDEQ recommends, on page 15 "keeping electronic records (e.g., spreadsheets, databases) for compatibility with GIS for convenient tracking purposes."

#### Comment #12

Pages 13-15, EPA commends MDEQ for significantly expanding the IDDE Section from the previous permit. The IDDE Section is much better, much more specific and prescriptive in this version of the permit than in the previous.

#### Comment #13

Page 13, ACT 5 (E) Remove "reasonably" from the third sentence, change "reasonably expected" to "expected." It is unclear what "reasonably expected" infers.

## Comment #14

Page 13, ACT 5 (E) (i) Change the sentence to read "Document in your plan any local"...as opposed to having the sentence end with the phrase "discharges in your plan."

#### Comment #15

The draft permit eliminates the previous permit's item S-9 (3) (D), which contained the illegal dumping provision. Is there still a provision for illegal dumping in this draft but perhaps it has been moved?

## Comment #16

Page 16, ACT 5 (4) Change to: "The regulated entity shall develop, implement, revise and..."

#### Comment #17

Page 16, ACT 5 (4) (A) Change to: "Develop, implement, update and enforce...."

## Comment #18

Page 16, ACT 5 (4) (A) (i) Second sentence would be more clear if it started as "Existing or new (draft) ordinances..." and third sentence read: "New (draft) ordinance BMPs shall be submitted to MDEQ for review at least 30 days before proposed adoption." This is provided that when you refer to draft ordinances, they are typically new ones.

#### Comment #19

Page 17, ACT 5 (4) (B) EPA suggests the following rewrite to the paragraph to more strongly emphasize the importance of Low Impact Development (LID) and Green Infrastructure (GI). Suggested language could be, for example: "Select BMPs which are most appropriate to achieve measurable goals to reduce and control runoff from active and post-construction sites. MDEQ strongly recommends adopting ordinances to promote and encourage the implementation of non-structural BMPs, including LID and Green Infrastructure. This includes site-design and infiltration techniques such as green roofs, porous pavement, eliminating curbs and gutters, grassed swales, rain gardens, rain harvesting, low-impact and cluster developments, and disconnection of impervious areas from riparian zones. For guidance in selecting an appropriate BMP, please refer to Volume 2 of the Mississippi Handbook for Erosion Control, Sediment Control and Stormwater Management on Construction Sites and Urban Areas."

#### Comment #20

Page 18, ACT 5 (5) Change to: "The regulated entity should develop, implement, revise and update a program..."

#### Comment #21

Page 18, ACT 5 (C) Add the following to this Section, including the underlined words to what was already in the draft: "Within one year of obtaining permit coverage, the permittee shall review local codes and ordinances. Newly-designated and currently permitted MS4s shall update codes and ordinances, if necessary, within 4 years of coverage under this permit. Currently permitted MS4s shall continue to implement existing permanent Stormwater Management Program until the codes and ordinances review and update is completed. The permittee should consider making revisions to policies, codes and ordinances that will achieve the greatest improved protection of receiving waters. Use of an ordinance or other regulatory mechanism to address post construction runoff from publicly-owned and privately-owned new development and redevelopment projects shall be made to the extent..."

Comment #22

Page 18, For the change in ACT 5, (5) (D) MDEQ added a Post-Construction requirement for "landowners and developers to develop and maintain post construction BMPs that are at minimum as effective at controlling and treating stormwater runoff as the site was preconstruction." How will this be measured? Will it be estimated? Does preconstruction mean predevelopment? The following comments are language suggestions for replacing Sections D and E, and keep E, just change its designation to F.

Comment #23

Page 18, The following is suggested language for ACT 5 (D): "The MS4 must implement and enforce permanent stormwater controls that are comprised of runoff reduction and pollutant removal. The permittee must require that stormwater discharges from new development and redevelopment sites be managed such that post-development hydrology does not exceed the predevelopment hydrology at the site, in accordance with the performance standards contained in this section. Runoff reduction is the preferred control practice as it can achieve both volume control and pollutant removal."

Comment #24

Page 18, The following is suggested language for ACT 5 (E): "Develop, site design standards for all new and redevelopment and require, in combination or alone, management measures that are designed, built and maintained to infiltrate, evapotranspire, harvest and/or use, at a minimum, the first inch of every rainfall event preceded by 72 hours of no measurable precipitation. This first inch of rainfall must be 100% managed with no storm water runoff to be discharged to surface waters. For all new and redevelopment on the private property, the MS4 may opt to have controls installed on that private property, in the public right-of-way, or a combination of both. Post-construction BMPs would include, but are not limited to: grassed swales (Vol. 1, Ch. 4, pg. 162) for runoff conveyance, filter strips (Vol. 1, Ch. 4, pg. 261) and bioretention systems for filtration of sediment (Vol. 1 Ch. 4, pg. 25), runoff control using dry/wet retention/detention basins, and buffer zones for stream protection (Vol. 1, Ch. 4 pg. 25 and Vol. 2 Ch. 5, pg. 96). Please refer to the Mississippi Handbook for Erosion Control, Sediment Control and Stormwater Management on Construction Sites and Urban Areas for more information. Limitations to the application of runoff reduction requirements include, but are not limited to:

- a. Where a potential for introducing pollutants into the groundwater exists, unless pretreatment is provided;
- Pre-existing soil contamination is present in areas subject to contact with infiltrated runoff; and
- c. Sinkholes or other karst features.

Pre-development infiltrative capacity of soils at the site must be taken into account in selection of runoff reduction management measures."

Comment #25

Page 24, ACT 6 (3) (B) (iii) add the sentence "This will include requiring additional and sufficient BMPs in the SWMP to numerically show through pollution reduction estimates that the load reductions called for by the TMDL are being met."

# Comment #26

Page 34, typo in ACT 11 in the definition of BMPs, the terminology "reduce the pollution of state" probably should be changed to "pollution of the state."

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# UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

REGION 4
ATLANTA FEDERAL CENTER
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APR 1 5 2010

Mr. Steve Spengler
Chief
Surface Water Division
Office of Pollution Control
Mississippi Department of Environmental Quality
515 East Amite Street
Jackson, Mississippi 39201

Re: Expectations for Municipal Separate Storm Sewer System permits

Dear Mr. Spengler:

The U.S. Environmental Protection Agency (EPA) has recently finalized the "MS4 Permit Improvement Guide" (Guide) which is available on our website at: www.epa.gov/npdes/pubs/ms4permit\_improvement\_guide.pdf. The Guide underscores the importance of permit requirements that are clear, specific, measurable, and enforceable, and it includes examples of permit provisions as well as sample language for supporting rationale. As described in my letter to your office dated November 24, 2009, EPA Region 4 expects Municipal Separate Storm Sewer (MS4) permit requirements and performance standards to reflect a level of detail and specificity similar to that of the examples in the Guide. I would also like to take this opportunity to further describe EPA Region 4's expectations for MS4 National Pollutant Discharge Elimination System (NPDES) permits submitted for our review, and to identify aspects of the permits that are particular areas of focus when we conduct our review.

The Region will be taking a closer look at future MS4 permits for clear, specific and measurable performance standards sufficient to ensure the implementation of controls to reduce the discharge of pollutants to the maximum extent practicable, as required under Section 402(p)(3)(B) of the Clean Water Act. Our expectation is based on the principle that it is the permit writer's obligation to determine performance standards that are consistent with the maximum extent practicable (MEP) requirement, and the development of appropriate performance standards should not be left to the permittee. Our expectation for more effective requirements also serves to help gauge progress and delineate accountability, and it applies to all sections of the permit. As such, permits should specify minimum requirements, with schedules, for the establishment and maintenance of a MS4's stormwater management program. For example, specific obligations and timeframes should be included in the public education and outreach/public involvement and pollution prevention/good housekeeping components of the permit. Where applicable (primarily Phase I MS4s), permits should include measurable performance standards for inventorying and inspecting industrial and other high-risk stormwater systems, as well as specific conditions for monitoring activities (e.g., monitoring type, frequency, location, protocol, etc.). EPA also expects MS4 permits to require that the permittee operate its system and any structural controls in a manner to reduce the discharge of pollutants, and to that

end permits should include enforceable and effective system inspection and maintenance requirements.

Although the specific performance standards and required actions may vary depending on the specific MS4 and its programs, future MS4 permits should be explicit in what MEP-level controls are required. It is not EPA's intention to prescribe specific thresholds of performance necessary for an MS4 to reduce pollutants from stormwater to the MEP. Instead, we are looking to States to determine appropriate MEP-levels of control on a case-by-case basis and to write clear and enforceable performance standards and required actions that reflects this level of control. Such specificity will be especially important with the following permit elements, of which Region 4 has identified as an area of focus: (1) Total Maximum Daily Load (TMDL) implementation, (2) stormwater controls for construction activities, (3) stormwater controls for new development and redevelopment (post-construction), and (4) illicit discharge detection and elimination. Our expectation for each permit area is described in further detail below.

## Implementation of TMDLs

Pursuant to 40 CFR §122.44(d)(1)(vii)(B), NPDES permits must contain conditions that are consistent with the assumptions and requirements of wasteload allocations (WLAs) in applicable TMDLs. Accordingly, for MS4s subject to a TMDL approved or established by EPA, we expect permit requirements regarding TMDL implementation to be clear, specific and measurable in terms of required actions or achievement of specific performance standards. First, individual permits should identify all applicable TMDLs. Phase II MS4 general permits should contain provisions that require MS4s to determine the applicability and details of any EPA-approved or established TMDL to their discharge, unless the State affirms in the permit that it is responsible for notifying the permittee of such information.

Second, permits should include clear and specific requirements related to the identification, evaluation, and implementation of appropriate water quality controls, with attached timeframes and/or milestones, which are necessary to address any applicable WLA. Given that WLAs for MS4s are typically implemented through non-numeric requirements in the permits, effective TMDL implementation for an MS4 often depends on selecting the appropriate combination of control measures to achieve progress towards addressing the WLA, coupled with monitoring to support the determination of when additional or enhanced control measures are necessary. Some approaches to having clear and specific requirements in terms of control measures could include: requiring MS4s to develop a TMDL implementation plan that identifies enhanced control measures the MS4 will implement and explains how measures implemented by the MS4 will address the WLA; the identification of specific best management practices (BMPs) or a menu of potential BMPs in the permit for MS4s to evaluate and select; reference to BMP performance standards; benchmarks that trigger adaptive management requirements; or requiring MS4s to review existing BMPs and select additional control measures to achieve progress towards addressing the WLA. Whether States choose to identify specific BMPs or rely on MS4s to do the evaluation and selection on their own, EPA expects permits to include language that clearly describes the specific actions required on the part of the permittee, including requirements for adaptive management if initial implementation plans are not demonstrating adequate progress towards achieving the WLA.

Permits should also address the monitoring and assessment of MS4 pollutant load contributions - either at the outfalls and/or in the receiving waters. The permit could include specific provisions for monitoring and assessment activities to first establish a baseline that characterizes the relative pollutant load contributions from the areas of the MS4 that discharge to waters subject to a TMDL. Pursuant to 40 CFR §122.44(i), NPDES permits must also specify the monitoring necessary to determine compliance with effluent limitations, including effluent limits that are specified as BMPs. For example, the permit could require monitoring of BMP performance to assess if the expected load reductions attributed to BMP implementation are achieved and to determine if additional BMPs are necessary to address any applicable WLAs. To better gauge BMP effectiveness and quantifiable improvements to water quality, permits should be clear and specific on what elements, such as monitoring frequency, locations, duration, etc., must be included in a MS4's monitoring plan.

The Guide does not explicitly include or address the implementation of TMDLs in MS4 permits largely due to the fact that EPA is currently developing a policy document that will address many of these issues. The "TMDLs to Stormwater Permit Handbook," which will be released in the coming months, provides information on approaches for translating TMDL WLAs and implementation recommendations into NPDES stormwater permit requirements. Upon its release, we encourage you to consider it as another resource. Additionally, our office is in the process of drafting example language for TMDL implementation for MS4s, which we are hopeful will be useful to States in developing permit limits for applicable TMDLs. It is our intention to share a draft version with your staff in the coming month for your feedback and consideration. If you have any suggestions or recommendations regarding this matter, we welcome you to share those with us as we proceed in this effort.

## Construction

Section 402(p)(3)(B)(iii) provides that MS4 permits must require controls, "including management practices, control techniques and . . .such other provisions" determined appropriate to reduce the discharge of pollutants from MS4s to the MEP. One area in which MS4s must develop and implement MEP-level controls is in the control of pollution in runoff from construction sites (see Phase I MS4 regulations at 40 CFR §122.26(d)(2)(iv)(D) and Phase II MS4 regulations at 40 CFR §122.34(b)(4)(ii)), including requirements for construction site plan reviews and a construction site inspection and enforcement program.

Permits should require MS4s to implement a process for site plan review to ensure that to the maximum extent practicable, construction plans are reviewed prior to commencement of construction activities to ensure that adequate measures will be implemented to protect water quality, and that any water quality-related requirements of the MS4's construction program are followed. Regulations for Phase II MS4s require "procedures for site plan review which incorporate considerations of water quality impacts." Similarly, Phase I regulations require "procedures for site planning." Accordingly, permits should clearly specify the minimum stormwater requirements concerning erosion and sediment control, pollution prevention, and other State regulations or local ordinances, and a review procedure should be outlined in the permit as well. A schedule for review and the conditions for approval for construction occurring

within the MS4 should also be included in the permit in order to provide a mechanism to track construction activities and enforce control standards. Site plan review requirements for Phase I MS4s should be at least as stringent as the Phase II requirements, as Phase I MS4s have had more time for, and typically have more resources for, stormwater management program development. Further, impacts from construction activity tend to be greater in Phase I communities.

As part of a construction site inspection and enforcement program, permits should establish a minimum inspection frequency or other measurable level of effort requirement for inspecting construction sites. The absence of a measureable requirement for construction site inspections undermines the enforceability of the permits with respect to the permittees' construction program. The inclusion of such requirement would help to ensure that the permittees will reduce pollutants in stormwater entering the MS4 from construction sites to the maximum extent practicable, as required by the Section 402(p)(3)(B)(iii).

States may choose an inspection frequency that is appropriate for each MS4, provided that the inspection frequency reflects an MEP-level of control for the MS4 and it is measurable and enforceable. The inspection obligation could be expressed as a minimum time interval for inspecting active sites, which could vary for categories of sites with different priority levels. Alternatively, the permit could establish a minimum percentage of inspection sites that must be inspected within specified time intervals. The frequency could also be tied to significant rainfall events, and States might choose to require an initial inspection prior to or soon after the commencement of land disturbance. The permit could also require the development and implementation of a prioritization scheme for addressing more significant sites based on criteria laid out in the permit (e.g., nature and extent of construction activity, slope of the site, proximity and/or water quality status of receiving water, etc.). EPA expects that permitting authority judgment and discretion will be applied to establish an appropriate construction inspection performance standard. To the extent that such requirements are already imposed through non-Clean Water Act requirements utilizing processes outside of the NPDES program, such requirements could be referenced as a relevant minimum requirement that MS4's could incorporate and implement in their own construction program. However, EPA does expect that the inspection obligation will be defined in a way that is effective, measurable, and enforceable.

## **Post-Construction Requirements**

As noted above, Section 402(p)(3)(B)(iii) provides that MS4 permits must require controls to reduce the discharge of pollutants to MEP and contain such other provisions as the Administrator or State determines appropriate for the control of such pollutants. Another area in which MS4 permittees must develop and implement MEP-level controls is in the control of pollution from residential and commercial areas, including "controls to reduce the discharge of pollutants from municipal separate storm sewers which receive discharges from areas of new development and significant redevelopment." (see Phase I MS4 regulations at 40 CFR §122.26(d)(2)(iv)(A)(2)). The requirement for a program to control pollution from new development and significant redevelopment must "address controls to reduce pollutants in discharges from municipal separate storm sewers after construction is completed." *Id.* Similarly, regulations for Phase II MS4s require the development and implementation of "a

program to address storm water runoff from new development and redevelopment projects that disturb greater than or equal to one acre." (see Phase II MS4 regulations at 40 CFR §122.34(b)(5)).

Permits should include specific, enforceable language that require MS4s to establish and enforce minimum requirements, such as flow control standards or requirements to infiltrate, evapotranspire, harvest or re-use stormwater from new and redeveloped sites after construction is completed, when such controls represent control of discharges to the maximum extent practicable. For example, the permit could require enactment and enforcement of an ordinance that requires that post-construction flow be consistent with pre-development characteristics, or that precipitation from a rain event of a particular size be managed to prevent off-site stormwater discharges. Low-impact development approaches such as infiltration, reuse and evapotranspiration should be utilized to the maximum extent practicable. EPA expects States to use their judgment and discretion to arrive at enforceable permit requirements to control pollutants in stormwater discharges entering the MS4 from new development and redevelopment sites that are appropriate for States and the permittees. To the extent that such requirements are already imposed through non-Clean Water Act requirements imposed under processes outside of the NPDES program, such requirements could be referenced as a relevant minimum requirement that MS4's could incorporate and implement in their own post-construction program. However, EPA expects any post-construction requirement to be defined in a way that is effective, measurable, and enforceable. In addition, permits should include enforceable requirements that MS4 post-construction programs include site plan review procedures, ordinances requiring longterm operation and maintenance of post-construction BMPs and including inspection and enforcement authorities, development and maintenance of an inventory of post-construction controls, and minimum inspection frequencies.

On a related matter, in December 2009 EPA issued a document entitled, "Technical Guidance on Implementing the Stormwater Runoff Requirements for Federal Projects under Section 438 of the Energy Independence and Security Act" (see http://www.epa.gov/owow/NPS/lid/section438/pdf/final\_sec438\_eisa.pdf). The Energy Independence and Security Act Section 438 was enacted with the intention of maintaining and restoring pre-development site hydrology during the development or redevelopment process in order to protect and preserve both the water resources onsite and those downstream. This guidance was prepared to provide technical guidance and background information to assist federal agencies in achieving, measuring, and evaluating their compliance with Section 438. It describes two approaches to establishing the Section 438 performance objectives through the design, construction, and maintenance of stormwater management practices that manage rainfall onsite. The first option involves the prevention of the off-site discharge of precipitation from all rainfall events less than or equal to the 95th percentile rainfall event to the maximum extent technically feasible. The second option allows the designer to conduct a site-specific hydrologic analysis to determine the pre-development runoff conditions and quantify the post-development runoff volume and peak flow discharges that are equivalent to pre-development conditions. Included in the document are several case studies of sites with stormwater management systems that retain the 95<sup>th</sup> percentile storm onsite.

The Section 438 Guidance reflects EPA's perspective that retaining all storms up to and including the 95<sup>th</sup> percentile storm event is analogous to maintaining or restoring the predevelopment hydrology with respect to the volume, flow rate, and duration and temperature of the runoff for most sites. This 95<sup>th</sup> percentile approach was identified and recommended because this storm size represents the volume that appears to best represent the volume that is fully infiltrated in a natural condition and thus should be managed onsite to achieve the objectives of Section 438.

Although the performance standards and practices discussed in this guidance were developed to apply to federal development and redevelopment projects, they can serve as a useful guide for municipal systems as well. We encourage States to replicate similar green infrastructure and quantifiable objectives in their MS4 permits, or at least develop a plan on working towards comparable requirements. We also recognize that some MS4s may not be equipped to achieve a 95<sup>th</sup> percentile storm event, but Region 4 does expect States to use their judgment to identify in MS4 permits an alternatively appropriate, specific, and measurable threshold that maximizes the practice of infiltration, evapotraspiration, and/or rainwater harvesting and use. The concepts and principals included in this guidance document are among those being evaluated and considered as part of EPA's stormwater rulemaking effort, which was initiated in October 2009. The rule is intended to address, at a minimum, stormwater from development and redevelopment sites and is expected to be completed by November 2012.

# Illicit Discharge Detection and Elimination Program

Another area in which MS4 permittees must develop and implement MEP-level controls is in the development and implementation of a program to detect and eliminate illicit discharges and improper disposal into the MS4. See Phase I MS4 regulations at 40 CFR §122.26(d)(2)(iv)(B) and Phase II MS4 regulations at §122.34(b)(3). Such a program should include, among other requirements, inspections, on-going field screening activities, investigation when field screening or other information indicates reasonable potential of illicit discharge, and procedures for removal of identified illicit discharges and improper disposal. 40 CFR §122.34(b)(3)(iv). To ensure that a permittee's illicit discharge detection and elimination (IDDE) program controls pollution discharges to the MEP, permits should include measurable and enforceable requirements for conducting field screenings, conducting inspections, initiating and completing investigations of suspected illicit discharges, and taking action to eliminate identified illicit discharges as soon as practicable. The inspection requirements for the industrial and high-risk program may overlap with inspections conducted to support the IDDE program.

EPA may object to permits provided to our office per the NPDES Memorandum of Agreement that do not meet the expectations in this letter. As appropriate, we encourage you to engage your regulated MS4 community and utilize the available data and information when establishing clear, specific and measurable performance standards that reflect an MEP-level of control for their permits. It is our intention to work constructively with your office to resolve any potential issues or challenges concerning this, and we are pleased to provide any assistance in this regard. If you have any questions, please feel free to contact me at (404) 562-9345, or have your staff contact Mr. Thomas McGill at (404) 562-9243 or Ms. Mary Kuo at (404) 562-9847.

Sincerely,

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Director

Water Protection Division

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# KY Phase II TMDL Language

# TOTAL MAXIMUM DAILY LOADS AND IMPAIRED WATERS

# 1. Total Maximum Daily Loads (TMDLs)

If there is an approved existing TMDL for an impaired waterbody into which the permitted MS4 discharges and for which the MS4 causes or contributes to water quality impairment(s), the Division of Water will review the TMDL and applicable wasteload allocation(s) to determine whether the TMDL allocates pollutant reductions for stormwater discharges. If current discharges from the MS4 are not meeting TMDL allocations, the Division of Water will notify the permittee of that finding and require that the SWQMP identified in Part II of this general permit be modified. This modification will occur in conjunction with the normal SWQMP updating process, in accordance with Part II.C.2.d of this permit relating to Plan Implementations and Modifications. This modification will include any applicable and appropriate BMPs to implement the TMDL within a reasonable timeframe. The TMDL shall be implemented by the MS4 to the Maximum Extent Practicable (MEP). The Division of Water may require the MS4 to obtain an individual MS4 permit in order to meet the requirements of the TMDL.

## 2. Evaluation of TMDL Allocations

During the permit term, if there is an approved TMDL established for a pollutant of concern in the permittee's stormwater discharges, the permittee shall identify the impaired stream segment(s) and/or tributaries to those impaired stream segments and the location of all known MS4 major outfalls discharging a pollutant of concern under the TMDL to those segments or occurring within those segments. The permittee shall evaluate the discharge load associated with the identified MS4 major outfalls for the pollutant, including monitoring, reporting and/or otherwise, at issue. Prior to any reopening of this permit under Part III.C., the permittee shall consider and propose to the maximum extent practicable, applicable and appropriate best management practices guided by the wasteload goal of the TMDL, and a schedule of implementation for those Best Management Practices. Nothing herein shall prevent the permittee from pursuing a variance or exceptions based upon a use attainability analysis or the criteria for exceptions set forth in 401 KAR 10:031. Applicable limitations, conditions and requirements contained in the TMDL are also to be addressed in the SWQMP.

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Page II-12
Permit No. KYG200000
AI No.:35050

# 3. Monitoring relative to the TMDL

The permittee shall develop and implement an appropriate monitoring program that is designed to evaluate the effectiveness of the BMPs to address the TMDL.

An effective monitoring program could include:

- a. Effluent monitoring at selected outfalls that are representative of particular land uses or geographical areas that contribute to pollutant loading before and after implementation of stormwater control measures; or
- b. Monitoring of pollutants of concern in receiving waterbodies, both upstream and downstream of MS4 discharges, over an extended period of time; or
- c. In-stream biological monitoring at appropriate locations to demonstrate the recovery of biological communities after implementation of stormwater control measures.

The program including monitoring strategies, locations, frequencies, and methods shall be submitted to the Division of Water for approval within 12 months of the approval date of the TMDL. Details of the monitoring plan and monitoring data should be included in the annual report required by the MS4 permit.

Impaired Water Bodies

For impaired waters that lack a TMDL, the permittee shall identify impaired waters into which the MS4 discharges, and evaluate its Best Management Practices to be included in the SWQMP, at a minimum, this information should be updated in the annual report following the finalization of the Kentucky's Section 303(d) list of impaired waters (every two years) with respect to any new or expanded MS4 discharges for pollutants of concern to ensure effectiveness of post construction control requirements to achieve the MEP standard, evaluation may be conducted on a watershed basis.

# TN Phase II MS4 TMDL Language

# 3. SPECIAL CONDITIONS

# 3.1. Discharges to Water Quality Impaired Waters

Using the most current 303(d) list published on the division's web site along with the GIS mapping tool, the MS4 must determine whether stormwater discharges from any part of the MS4 contribute pollutants of concern to an impaired waterbody. For those impaired waters, the MS4 must determine whether or not a TMDL has been established and approved by EPA. A list of EPA-Approved TMDLs as well as EPA-Established TMDLs for Tennessee waters can be found on the division's web site.

- 3.1.1. Discharges into Waterbodies with EPA-Approved or Established TMDLs
  The MS4 must implement stormwater pollutant reductions consistent with assumptions and requirements of any applicable wasteload allocation(s) in TMDLs established or approved by EPA. If an MS4 discharges into a water body with an approved or established TMDL, then the Stormwater Management Program must include BMPs specifically targeted to achieve the wasteload allocations prescribed by the TMDL. The SWMP must include a schedule for installation of such BMPs. A monitoring component to assess the effectiveness of the BMPs in achieving the wasteload allocations must also be included in the SWMP. Monitoring can entail a number of activities including but not limited to: outfall monitoring, in-stream monitoring or modeling. Monitoring requirements are further described in part 5 of this permit.

  Not later than 6 months following the TMDL adoption, the SWMP shall be revised to meet the implementation of waste load allocations (WLA) as specified in the TMDL. If the source of the impairment has been determined, management measures specific for reducing pollutant of concern from that specified source shall be included.
- 3.1.2. Retrofit Plan Requirements in EPA-Approved or Established TMDLs Where TMDL implementation plans require MS4s to retrofit existing developed sites that are impacting water quality, the retrofit plan must be developed within the timeframes established by the TMDL and must emphasize controls that infiltrate, evapotranspire, or harvest and use stormwater discharges. The plan must include:
- a) An inventory of potential retrofit locations, which considers, at a minimum:
- · Locations that contribute pollutants of concern to an impaired waterbody
- Locations that contribute to receiving waters that are significantly eroded
- Locations that are tributary to a sensitive ecosystem or protected area
- Locations that are tributary to areas prone to flooding
- b) An evaluation and ranking of the inventoried locations to prioritize retrofitting which includes, at a minimum:
- · Feasibility
- Cost effectiveness
- · Pollutant removal effectiveness
- Impervious area potentially treated

- Maintenance requirements
- Landowner cooperation
- Neighborhood acceptance
- · Aesthetic qualities, and
- Efficacy at addressing concern.

3.1.3. Discharges to Impaired Waterbodies without EPA-Approved TMDLs MS4s that have discharges containing pollutants of concern into a receiving water which has been listed on the Section 303(d) list of impaired waters must document in the SWMP how the BMPs will control the discharge of the pollutants of concern, and must demonstrate that the discharge will not cause or contribute to an impairment. A monitoring component to assess the effectiveness of the BMPs in controlling the discharge of pollutants of concern must also be included in the SWMP. Monitoring can entail a number of activities including but not limited to: outfall monitoring, in-stream monitoring or modeling. Monitoring requirements are further described in part 5 of this permit.

We see these comments as an opportunity to develop a permit that is consistent with the Clean Water Act and protective of water quality. It is our opinion that addressing these comments will result in an MS4 permit that is more in accordance with the Region 4 letter of April 15, 2010, because it will include requirements that are clear, specific, measurable, and enforceable. Upon your review of the enclosed comments and supporting documents, please contact us at your earliest convenience if you would like to discuss them. Once we resolve these topics, we request to be afforded an additional review opportunity of the permit prior to issuance. If you should have any questions, please contact Chris Plymale of my staff at (404) 562-9794.

Sincerely,

Christopher B. Thomas, Chief Pollution Control and Implementation Branch Water Protection Division

Enclosure

Chris Plymale

Barbara Walton

Natalie Ellington

Christopher B. Thomas

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## UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

REGION 4
ATLANTA FEDERAL CENTER
61 FORSYTH STREET
ATLANTA, GEORGIA 30303-8960

MAY 2 0 2011

Ms. Coleen H. Sullins
Director, Division of Water Quality
North Carolina Department of Environment
and Natural Resources
1617 Mail Service Center
Raleigh, North Carolina 27699-1617

Dear Ms. Sullins:

Thank you for the opportunity to review North Carolina's draft National Pollutant Discharge Elimination System (NPDES) permits for 88 small (Phase II) Municipal Separate Storm Sewer Systems (MS4s). The U.S. Environmental Protection Agency, Region 4, completed its review of the draft permits, received by our office via electronic submission on April 12, 2011. Based on our review of the draft permits, we have significant comments regarding requirements for construction controls, which are described in the enclosure. The enclosure also describes other comments that we are providing for your consideration.

Also, your staff has informed us of major issues that were raised through public comments that were submitted to your office regarding the small MS4 permits. Accordingly, pursuant to Section IV.B.6.c. of the Memorandum of Agreement between the North Carolina Department of Environment and Natural Resources (NCDENR) and the EPA, and in accordance with 40 Code of Federal Regulations § 123.44, NCDENR must submit a copy of the proposed final permits for further EPA review prior to issuance. Within fifteen (15) business days of the date the proposed permits are received by our office, we will notify both NCDENR and the applicant(s) of any general objections, or if we intend to extend the EPA review time on the proposed permits to the full ninety (90) calendar days to provide specific objections to the proposed permits. If the EPA does not notify you within the initial fifteen (15) day period that we have objections to the permits, or that we will extend our review time to ninety (90) days, then NCDENR may issue the permits as final. If the enclosed comments, particularly for construction controls, are not adequately addressed in the proposed permits, the EPA may object to the permits.

The EPA appreciates North Carolina's engagement in discussions with my staff during the past several months regarding preliminary draft versions of these permits. Although we have concerns with the requirements for construction controls in the draft permits, we recognize that the cooperation of your

staff has resulted in the resolution of many other issues that were initially identified. If you have any questions, please contact Michael Mitchell of my staff at (404) 562-9303.

Sincerely,

Christopher B. Thomas, Chief

Pollution Control and Implementation Branch

Water Protection Division

Enclosure

# EPA Comments on North Carolina NPDES Permits for 88 small (Phase II) MS4s

## **Construction Site Stormwater Runoff Controls**

1. Permits for municipalities that rely on a County with a delegated Erosion and Sediment Control Program (e.g., Town of Ayden)

The permits do not include controls for construction site stormwater runoff as required by 40 CFR 122.34(b)(4). We recognize that these municipalities rely on counties in the state with delegated Erosion and Sediment Control programs and that Part II.A.6. of the permits acknowledges that permittees remain responsible for compliance with the construction control measure if the other entity fails to perform the permit obligation to implement the control measure, in accordance with 40 CFR Section 122.35(a). However, the permit does not specify any construction site stormwater runoff controls for which the MS4 is responsible. Without such requirements, it is unclear how to determine whether the control measure has been adequately implemented by either the permittee or a relied-upon county, and the permit does not ensure that the construction site stormwater runoff control program will be consistent with the maximum extent practicable (MEP) standard. These permits should be revised to include clear, specific, measurable, and enforceable requirements for construction stormwater controls including requirements for site plan reviews and a construction site inspection and enforcement program.

2. <u>Permits for municipalities that rely on the State Erosion and Sediment Control Program (e.g., Town of Archdale)</u>:

Consistent with 40 CFR 122.35(b), the permittee may rely on the permit issuing authority for implementing one or more of the six minimum controls as long as the permit issuing authority implements them in manner that reflects a maximum extent practicable (MEP)-level of control for the municipalities. Based on information provided by North Carolina, including information contained in the permit fact sheet, EPA appreciates the historical performance of the State Erosion and Sediment Control program in implementing controls for construction site stormwater runoff on behalf of municipalities. However, it is important for North Carolina to verify that it expects this same level of effort to continue in the future in order to ensure that the State will fulfill an MEP-level of control on behalf of the permittees during the permit term. NCDENR needs to verify in its permit fact sheet or in other written form that it will continue the same level of performance with respect to its construction controls (i.e., performance for site plan reviews and a construction site inspection and enforcement) for each of the permittees throughout the permit term. If NCDENR provides such verification and permits are issued that allow the State to implement construction controls on behalf of the permittee, EPA would monitor the performance of the State to ensure the adequacy of this approach and consider such performance in the review of future permits that use this approach.

3. Permits for municipalities with a delegated Erosion and Sediment Control Program (e.g., Town of Apex):

The permits do not include controls for construction site stormwater runoff controls as required by 40 CFR 122.34(b)(4). These permits should be revised to include clear, specific, measurable, and enforceable requirements for construction stormwater controls, including requirements for site plan reviews and a construction site inspection and enforcement program.

#### Other Comments

- 4. Regarding Program Implementation, we recommend adding the following provision to Part II.A.: "For each of the six minimum control measures, the Permittee shall incorporate written procedures for implementing these measures into the Storm Water Management Plan."
- 5. Regarding Public Education and Outreach:
  - a. We recommend revising the first provision of Part II.B.2. as follows to reflect the continuation of an existing program: "The permittee shall continue to implement the following BMPs ..."
  - b. We recommend adding clarification to the "Measurable Goals" section of item a. of the table as follows: "...Defined goals and objectives of the Local Public Education and Outreach Program based on at least three high priority community wide issues (e.g.,reduction of pollutants of concern(POC), promotion of pervious techniques used in the MS4, etc.)"
  - c. We recommend adding clarification to the "Measurable Goals" section of item j. of the table as follows: "...The permittee shall assess its stormwater education/outreach program annually and update as necessary. The Permittee must adjust their educational materials and the delivery of such materials to address any shortcomings found as result if these assessments."
- 6. Regarding Public Involvement and Participation, we recommend that the "Measurable Goals" section of item a. of the table in Part II.C.2. should specify a timeline that would ensure the permittee could make any necessary revisions to the SWMP within the first one or two years of the permit term.
- 7. Regarding Illicit Discharge Detection and Elimination:
  - a. We recommend that the "Measurable Goals" section of item d. of the table in Part II.D.2. should include the following additional language: "Whenever possible, outfalls should be located using a GPS, and photographs should be taken to provide baseline information and track operation and maintenance needs. Copies of this map must be available for review by DNR."
  - b. We recommend that the "Measurable Goals" section of item f. be revised to clarify that the permittee is required to report annually its progress in implementing its training program.
- 8. Regarding Pollution Prevention & Good Housekeeping for Municipal Operations, we recommend that the "Measurable Goals" section of item k. of the table include a greater level of specificity, including timeframes by which training must occur, procedures or manuals must be written or implemented, etc.

- 9. We recommend revisions to the first paragraph of Part III as follows: "The Permittee's <u>annual</u> reporting and monitoring activities in support of this permit will be <u>sufficient to</u> <u>used to document</u> <u>and</u> indicate progress in implementation <u>and evaluate</u> effectiveness and results of the Stormwater Plan and individual components of the program."
- 10. The permit does not specify when annual reports are due. We recommend that Part IV.3 be revised to include such clarification (e.g., "The permittee must submit an annual report to the Department twelve months from the effective date of permit. Subsequent annual reports must be submitted every twelve months from the scheduled date of the first submittal.")
- 11. We recommend Part V.A.1.b. should be revised as follows to reflect updated penalty thresholds as defined in 40 CFR Section 19.4:
  - "...The Clean Water Act provides that any person who violates a permit condition is subject to a civil penalty not to exceed the maximum amounts authorized by Section 309(d) of the Act and the Federal Civil Penalties Inflation Adjustment Act (28 U.S.C. §2461 note) as amended by the Debt Collection Improvement Act (31 U.S.C. §3701 note) (currently \$27,500 \$37,500 per day for each violation). ... Also, any person who violates a permit condition may be assessed an administrative penalty not to exceed \$11,000 \$16,000 per violation with the maximum amount not to exceed \$137,500 \$177,500 ..."

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Concurrences:				
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REGION 4 ATLANTA FEDERAL CENTER 61 FORSYTH STREET ATLANTA, GEORGIA 30303-8960

SEP 2 2011

Ms. Coleen H. Sullins
Director, Division of Water Quality
North Carolina Department of Environment
and Natural Resources
1617 Mail Service Center
Raleigh, North Carolina 27699-1617

Subject: Review of the Proposed Final Permits for the Eighty-eight Small Municipal Separate Storm Sewer Systems (MS4s)

Dear Ms. Sullins:

This letter is to notify you that the Environmental Protection Agency will need additional time to complete its review of the proposed final National Pollutant Discharge Elimination System permits referenced above. The proposed final permits were transmitted by your office to the EPA via email on August 12, 2011. In accordance with the North Carolina/EPA Memorandum of Agreement and 40 Code of Federal Regulations § 123.44(a), the EPA is exercising its right to take the full ninety (90) days to make general comments upon, objections to, or recommendations with respect to the proposed final permits. If you have any questions, please contact Mr. Mike Mitchell of my staff at (404) 562-9303.

Sincerely,

Christopher B. Thomas, Chief

Pollution Control and Implementation Branch

Water Protection Division

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REGION 4
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OCT 2 6 2011

Mr. Bradley Bennett
Supervisor, Stormwater Permitting Unit
Division of Water Quality
North Carolina Department of Environment
and Natural Resources
1617 Mail Service Center
Raleigh, North Carolina 27699-1617

Subject: Review of the Proposed Final Permits for the Small Municipal Separate Storm Sewer Systems (MS4) -

Permit Number NCS000xxx

Dear Mr. Bennett:

In accordance with the U.S. Environmental Protection Agency/North Carolina Memorandum of Agreement, we have completed our review of the above referenced draft National Pollutant Discharge Elimination System (NPDES) Phase II Municipal Separate Storm Sewer Systems (MS4s) permit. The proposed draft permit was initially received by this office electronically for review on August 12, 2011. On August 30, 2011, the EPA requested a 90-day extension to provide adequate time for review. As stated in our previous discussions, while the EPA is in agreement with the overall intent of this general permit in regulating Phase II municipal stormwater discharges, we do have a few comments. Incorporation of our comments into the final permit will help the North Carolina Division of Water Quality (DWQ) to more clearly implement the NPDES storm water program. The EPA believes that adherence to these provisions is necessary for the permit to comply with the overall requirements of the Clean Water Act and regulations. Our comments are as follows:

- 1. The EPA agrees with the "technical" explanation of the state regarding the delegation issue; however, the Bureau of Land Resources (BLR) appears to be the implementing arm for the state with regards to inspections, enforcement, and tracking for Phase II MS4s. In other instances, a county may be delegated authority as designated by the BLR. The EPA maintains that the water quality concerns that may arise from improper installation of Best Management Practices (BMPs) and other abuses by local contractors may not be adequately enforced by the BLR. There needs to be additional clarification or mechanisms in place between the BLR and DWQ, via an enforcement agreement or other means which will ensure a blanket approach in addressing possible water quality violations and other onsite deficiencies. This matter can be resolved after issuance of the permit.
- 2. The local governments objected to the inclusion of requirements for impaired waters in the draft permits. 40 CFR Section 122.34 explicitly states that permits shall contain six minimum measures outlined in 40 CFR Section 122.34 (b). The six minimum measures do not include a section on impaired waters. Further guidance published on December 8, 1999, in 40 CFR Parts 9, 122, 123 and 124 states that "If a small MS4 operator implements the six minimum control measures in §122.34(b) and the discharges are determined to cause or contribute to non-

attainment of an applicable water quality standard, the operator needs to expand or better tailor its BMPs within the scope of the six minimum control measures." The state must ensure that annual assessments on the local governments include an update of the stormwater management plan. The intent of the Impaired Waters Section must be met by assessing each minimum measure and updating the stormwater management plan (on an annual basis) to expand or better tailor the MS4 operator's BMPs.

If you have any questions, please feel free to contact me, or have your staff contact Mike Mitchell at (404) 562-9303.

Sincerely,

Christopher B. Thomas, Chief

Pollution Control and Implementation Branch

Water Protection Division



REGION 4
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ATLANTA, GEORGIA 30303-8960

DEC 1 5 2010

Mr. Bradley Bennett, Supervisor Storm Water and General Permits Unit North Carolina Division of Water Quality 512 North Salisbury Street Raleigh, North Carolina 27626-0535

SUBJ: National Pollutant Discharge Elimination System Permit / Department of Defense Facilities (Small Regulated Municipal Separate Storm Sewer System) - Camp LeJeune (NCS000290), Fort Bragg (NCS000331), Seymour Johnson AFB (NCS000335), Marine Corps Air Station Cherry Point (NCS00034)

Dear Mr. Bennett:

In accordance with the Environmental Protection Agency/North Carolina Memorandum of Agreement, we have completed review of the above referenced draft National Pollutant Discharge Elimination System (NPDES) Permits for small regulated municipal separate storm sewer systems (MS4s) Department of Defense facilities and are including the following comments. We request to be afforded an additional review opportunity only if significant changes are made to the proposed permit prior to issuance or if significant comments objecting to the permit are received. Otherwise, please send us one copy of the final permit when issued.

#### Comments

1. Section F: Post-Construction Site Runoff Controls. There are several items listed under Section F. that need clarification. Similar to the section on Construction Site Runoff Controls, item no. 1 lays out the objectives for post-construction controls such as develop, implement and enforce a program to address stormwater runoff from new development and re-development projects..." Item no. 2 under this section says, "Construction projects that are performed by or under contract for, Camp LeJeune, including roads and bridges must meet the requirements of the stormwater management and water quality protection required by [NC] Session Law 2008-211, Section 2(a), 2(b), 2(c),...." It goes on to say "Camp LeJeune shall submit an application and appropriate fee to the Division for all projects...that disturb greater than 1 acre... All designs shall comply with the state BMP manual..." For the DoD facilities located outside of the coastal county areas, no performance criteria exists in the permit(s) for those areas located outside of the coastal counties, namely Jordan Lake, & Goose Creek. The applicable permits must address the issue of concern.

2. Item 2.c. - Adoption of the Universal Stormwater Management Program (USMP) – the permit states, "Adoption of the Universal Stormwater Management Program (USMP) meets the requirement to develop an implement a Post-Construction Control Program by the local government adopting an ordinance..." Clarification and language change is necessary to apply the USMP concept to the above subject military facilities to make distinctions from a "typical" non-military municipality. Will this, in fact, require the County in which the DoD facility is located to adopt the USMP, or does the military facilities have the authority to develop and implement a USMP? As stated earlier the role of the DoD facility needs to be clarified and identified in the applicable permit(s).

I hope these comments will be useful to your permitting efforts. Please give me a call at (404) 562-9303, if there are comments or questions.

Sincerely,

Mike Mitchell, Environmental Scientist

NPDES and Biosolids Permit Section

Permits, Grants, and Technical Assistance Branch

Water Management Division

## SECTION I: TOTAL MAXIMUM DAILY LOADS (TMDLs)

For the purpose of this permit, sensitive waters are waters:

- With a TMDL developed and approved, or established by EPA,
- Included in the most recent NC DEQ Section 303(d) list approved by EPA,
- That pursuant to NCDEQ Water Classifications & Standards, waters that are classified as either:
  - Outstanding National Resource Waters (ONRW)
  - Outstanding Resource Waters (ORW)
  - Trout Waters (Natural (TN), Put, Grow, and Take (TPGT) & Put and Take (TPT), or
  - Shellfish Harvesting Waters (SFH), and
  - In Source Water Protection Areas (SWPA)

### Determination of receiving water conditions and impacts

Permittees shall determine whether their MS4 discharges to receiving waters within a TMDL watershed or with a listing in the latest CWA §303(d) list of impaired waters that is associated with a water quality monitoring station (WQMS).

Permittees shall refer to the most recent CWA §303(d) list approved by EPA to determine WQMS impairment status and to identify the pollutant(s) of concern (POC). This information shall be updated in the MS4 annual reports subsequent to a 303(d) list being approved by EPA (2012, 2014 etc.)

For all TMDLs, permittees shall determine whether POC have potential to occur in MS4 storm water discharges. This information shall be included in the annual reports. If intended uses are fully supported for a particular TMDL, no further action on the permittee's part is needed for that TMDL.

#### **TMDL Monitoring and Assessment**

Where a TMDL Wasteload Allocation (WLA) is assigned to point sources, permittees shall review its SWMP requirements for the control of stormwater discharges to WQMS identified in the TMDL. For SMS4 discharges of the pollutant(s) of concern to TMDL waters, permittees shall identify discharges located in the TMDL watershed draining to the impaired WQMS. The SWMP shall include a TMDL Monitoring and Assessment Plan. The Monitoring and Assessment Plan component shall;

Be completed and submitted to the Department, as follows;

Within 12 months of the effective date of permit coverage for existing TMDL.

For newly designated permittee authorized to discharge storm water from their MS4 for the first time under this permit within 24 months of the effective date of permit coverage for the existing

#### Enclosure

#### TMDL.

Monitoring and Assessment Plans, shall be submitted within 12 months of the EPA-approval or establishment of new TMDL (Effective Date of the TMDL), after the first year of permit coverage.

Describe the activities permittees will conduct to address applicable WLA, including at a minimum the following elements:

The monitoring plan to measure the pollutant levels discharged from MS4 outfalls to waters subject to TMDL shall include:

- a. Schedule for conducting monitoring to be initiated as follows;
  - i. Not more than 18 months from the Effective Date of this permit for existing TMDL in the case of existing permittees,
  - Not more than 30 months from the Effective Date of the Certificate of Coverage for existing TMDL, and, for TMDL issued 24 months after the Effective Date of the Certificate of Coverage in the case of newly designated permittees.
  - iii. The monitoring plan for subsequently issued TMDL shall include a schedule for monitoring activities to be initiated no more than 18 months from the effective date of the TMDL for existing and newly designated permittees.
- b. Requirements to monitor the pollutants of concern, on a frequency necessary to determine statistically significant seasonal pollutant loads baseline, with duration of not less than two years. Minimum frequency and representativeness are stipulated as follows:
  - i. Samples and measurements taken for the purpose of the TMDL Monitoring Plan shall:
    - (1) Be representative of the MS4 discharges,
    - (2) Be reasonably distributed in time, while maintaining representative sampling,
    - (3) Not be terminated for the purpose of preventing the analysis results from a permit or water quality violation.
    - (4) Describe and consider frequency, mass and/or rate of discharge, as appropriate, and,
    - (5) Be expressed in terms of units or measurements consistent with the requirements contained in the WLA.

- ii. The information contained in the TMDL Monitoring Plan shall include:
  - (1) Monitoring locations, appropriate for representative data collection
  - (2) Explanation of why monitoring is being conducted for selected locations
  - (3) A Description of whether the location(s) are representative and contribute to pollutant loads,
  - (4) An indication the seasons during which sampling is intended,
  - (5) The pollutant of concern, or its surrogate(s), as a sampling parameter.
  - (6) Description of the sampling equipment, and,
  - (7) A rationale supporting the proposed *monitored location(s)* as reflective of water quality concerns to the MEP.
- iii. The TMDL monitoring plan shall focus on the pollutant of concern, or its surrogates, to characterize the quality and quantity of the SMS4 permitted discharges to evaluate the progress toward the WLA and / or Water Quality Standards (WQS) attainment by implementing one, or a combination, of the following strategies to the MEP:
  - (1) In-stream monitoring, and / or
  - (2) Outfall monitoring.

Monitoring location(s) should be selected based on one, all, or a combination of the following basis:

- (a) % MS4 area draining to the WQMS, at least 25%,
- (b) Collection of a representative contributing watershed,
- (c) Inclusion of the entire TMDL watershed within the MS4.
- iv. Established field and sampling protocols shall be followed when characterizing MS4 discharges, such as:
  - (1) Guidance for collecting samples under the stormwater permitting program while fulfilling NPDES stormwater sampling needs is provided in the NPDES Stormwater Sampling Guidance Document (EPA 833-8-92-001) and it is incorporated by reference herein. It can be found by visiting, <a href="http://www.epa.gov/npdes/pubs/owm0093.pdf">http://www.epa.gov/npdes/pubs/owm0093.pdf</a>
  - (2) Technical assistance and support for MS4 subject to NPDES program regulations for storm water point source discharges can be found in the Guidance Manual For the Preparation of NPDES Permit Applications for Discharges from Municipal Separate Storm Sewer Systems (EPA-833-B-92-002) and it is incorporated by reference herein. Visit, <a href="http://www.epa.gov/npdes/pubs/owm0246.pdf">http://www.epa.gov/npdes/pubs/owm0246.pdf</a>
- Permittees may collect composite samples using different protocols than those indicated above with respect to the time duration subject to the

- approval of the Department.
- vi. Where field analysis does not involve analytical methods approved under 40 CFR 136, permittees shall provide a description of the method used including the name of the manufacturer of the test method along with the range and accuracy of the test.
- vii. When no analytical method is approved, permittees may use any suitable method but must provide a description of the method.
- viii. For each monitoring location selected above, samples of storm water discharges shall be collected at a minimum of once per season per year.
- ix. Samples collected for laboratory analysis for all wet weather flows discharged from the MS4, shall be analyzed for the POC, or surrogates, in the TMDL.
- x. For MS4 discharges to tidal influenced waters, alternative accepted sampling protocols may be used to collect the samples required above. A description of the methodology used shall be provided as required under 40 CFR 122.26(d)(1)(iv)(D) & (d)(2)(iii). Adherence to the MEP is expected. Documentation of any deviation is required.
- c. Biological monitoring may be appropriate at some locations to demonstrate the recovery of biological communities after implementation of stormwater control measures. Monitoring locations in receiving waters must be at least both upstream and downstream of major MS4 discharges, with a frequency of at least annual basis for the permit term. Regardless, the monitoring type, representativeness of the location, pollutant(s) of concern and / or parameters to be sampled, description of sampling equipment and sampling frequency of ambient waters should be strategically designed to demonstrate the level of progress made towards meeting the applicable WLA and addressing impairments in the receiving and/or in downstream waters:
- d. For each pollutant of concern, permittees shall report on the progress of the characterization of the relative pollutant levels from various MS4 discharges to TMDL waters. Resulting data shall be included in every annual report following the commencement of monitoring for TMDL pollutant characterization.

#### Assessment of achieving the WLA / WQS

Assessment of achieving the WLA / WQS shall consist of the following:

- a. Process and schedule for assessing the monitoring data to prioritize areas of the SMS4 that will be targeted for implementation of BMP.
- b. Process and schedule for selection of appropriate BMP that will implement the WLA to the MEP, will protect water quality, and will satisfy the appropriate

- water quality requirements of the Clean Water Act, and,
- Updates to TMDL Monitoring and Assessment Plans to be submitted in each annual report.
- d. Progress on the TMDL Monitoring and Assessment Plan shall be documented in the Annual Report.

## **TMDL Implementation and Analysis**

Permittees shall initiate the monitoring described in Section (insert here) above.

Any monitoring data and information generated from the previous year of the monitoring program to satisfy the provisions above must be made available to the Department upon request.

Permittees shall complete and submit TMDL Implementation Plans for approved TMDL as follows:

- Within 48 months from the Effective Date of this permit, or 48 months from the new TMDL effective date, for existing permittees, and,
- Within 60 months from the Effective Date of Coverage, or 60 months from the new TMDL effective date, for newly designated permittees.
- TMDL Implementation Plans submitted to the Department and shall describe the following:
  - a. Assessment of the monitoring data. Where long-term data is available, this assessment should include an analysis of the data to show trends;
  - b. Prioritization of areas targeted for BMP implementation and underlying rationale;
  - Structural and nonstructural BMP to address the WLA. Permittees should include
    a brief explanation of why the BMP are selected (e.g., expected load reductions or
    percent of capture); and,
  - d. Schedule for completing BMP implementation as soon as practicable. The schedule shall describe all of the BMP implementation activities that are expected to occur during the current and the next permit term. In addition to the BMP implementation activities that are expected to occur during the current permit cycle, the TMDL Implementation Plan shall include proposed monitoring to be used to evaluate the effectiveness of the BMP and facilitate the iterative revision of the BMP Implementation Plan to achieve progress towards addressing the TMDL's WLA as long as the intended uses are not supported.
- Permittees shall implement those elements of the TMDL Implementation Plan that are scheduled to occur within the term of this permit. Schedules and plans herein are part of the re-application process.

#### Enclosure

- Progress on the TMDL Implementation and Analysis shall be documented in the Annual Report.
- Should there be no water quality improvement of the discharges from permitted SMS4 resulting from BMP implementation, permittees may be required to implement additional control measures, to make changes to the TMDL implementation plan, or to seek an individual permit, as needed.



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NOV 2 2 2016

Mr. Bradley Bennett Manager Storm Water and Permitting Program North Carolina Division of Water Quality 1617 Mail Service Center Raleigh, North Carolina 27699-1617

Subject: National Pollutant Discharge Elimination System Draft Template Permit(s) -

NPDES General Permit for Storm Water Discharges from Small Regulated Municipal

Separate Storm Sewer Systems (NCS000000)

Dear Mr. Bennett:

Thank you for the opportunity to review the preliminary draft National Pollutant Discharge Elimination System (NPDES) template permit for storm water discharges from small municipal separate storm sewer systems (MS4s). This template permit would be used for 74 individual small MS4 permits. We have completed review of the above referenced permit. The EPA has significant comments and concerns with the changes to this permit over the previous permit.

This template permit contains substantially dissimilar permit conditions over the previous permit, particularly in terms of implementing Total Maximum Daily Loads (TMDLs). These substantial changes in the draft template weaken the permittees' expectation to adequately achieve approved MS4 allocations from TMDLs and any compliance with schedules and/or directives that may have been established under their previous permits.

Additional revisions within the draft template permit further eliminate or weaken the MS4s ability to comply with provisions provided in the current permits. It is based on these concerns that the following comments are provided.

#### Comment 1

Part I - Permit Coverage - Part I, Page 2, No. 9

The draft template permit has deleted the following language:

"...Unless otherwise stated, full compliance with the requirements of the permit is expected upon the effective date of the permit."

The EPA recommends that this language remain in the draft permits proposed for public notice. This draft template permit is a re-issuance from previous permits. MS4s should already have well-established programs in place over several permit cycles. Any new provisions or "new" requirements stated in the permit should instead set timetables for development and implementation of such new requirements. The deletion of this requirement absolves municipalities from compliance of responsibilities as provided

under their existing permits and could be considered backsliding, which is prohibited by the Clean Water Act (CWA) Section 402(o). This would particularly apply to prior schedules already established for TMDL implementation, and to the timely implementation of the six minimum control measures.

Comment 2

Part II - Final Implementation and Controls for Permitted Discharges - Part II. Section A. Program Implementation, Page 1

The following language has been deleted from the first paragraph in the draft permit:

"...The overall program implementation however, may will be subject to, at a minimum, annual review by the Division to determine implementation status and progression toward meeting the pollutant control intent of the Stormwater Plan.

The EPA recommends that some level of review will be required to monitor compliance by the MS4 to their storm water management plan and the requirements of the permit. Additionally, MS4 are submitting annual reports to gauge progress within the programs. The EPA Remand Rule, which becomes effective in November. 2016, will reinforce the fact that the permitting authority is the entity responsible for establishing the terms and conditions of the permit necessary to meet the MS4 permit standard. The Rule also requires the permittee to evaluate compliance with the terms and conditions of the permit, the effectiveness of the components of its stormwater management program, and of achieving the measurable requirements in the permit. Rather than evaluate the appropriateness of selfidentified BMPs and measurable goals as previously required in permits, the rule will require permits to include terms and conditions to evaluate compliance with permit requirements, including achievement of measurable requirements established as permit requirements. This more closely aligns the required evaluation and assessment requirements with the requirements for developing permit conditions that are clear, specific, and measurable. It also more accurately describes the objectives of the evaluation and assessment requirements, given other revisions made in response to the remand to clarify that permitting authorities determine what constitutes compliance, not the regulated MS4s. The revised language in the current draft permit reduces the responsibility of the North Carolina Department of Environmental Quality from providing responsible and timely oversight of the regulated municipalities. The EPA recommends that the deleted language remain in the draft permits proposed for public notice.

Comment 3

Part II - Final Implementation and Controls for Permitted Discharges - Part II, Section A. Program Implementation, Page 2, No. 9

The following language has been deleted in the draft template permit:

" The permittee remains responsible for compliance if the other entity fails to perform the permit obligation and may be subject to enforcement action if neither the permittee nor the other entity fully performs the permit obligation."

40 C.F.R. §122.35 (a) authorizes reliance on another entity when specific conditions for such reliance are met: (1) the other entity actually implements the control measure, (2) the control measure implemented is at least as stringent as the NPDES permit requirement, and (3) the other entity agrees to implement the control measure on the permittee's behalf and the permittee remains responsible for compliance with the permit obligation if the other entity fails to implement the control measure. NCDEQ's removal of the sentence clarifying that the permittee would "remain responsible for

compliance if the other entity fails to fully perform the permit obligation, and may be subject to enforcement action if (neither) the other entity fails to perform the permit obligation" is inconsistent with 40 C.F.R. §122.35 (a). The EPA recommends that the deleted language remain in the draft permits proposed for public notice.

#### Comment 4

Part II - Final Implementation and Controls for Permitted Discharges - Part II, Section I. Total Maximum Daily Loads (TMDLs), Page 14 thru 16

# Comment 4a: Relaxation/Extension of Implementation Schedules of the TMDL

Since April 15, 2010, the EPA has continued to expect and recommend that MS4 permits should include clear and specific requirements related to the identification, evaluation, and implementation of appropriate water quality controls, with attached timeframes and/or milestones, which are necessary to address any applicable TMDL allocations. The vague and less stringent TMDL implementation language now appearing in the draft template permit is inconsistent with our expectation. This draft template permit language also appears to relax scheduled efforts of other TMDLs that address stormwater discharges from the MS4 in other areas of the State. This effort lessens the Maximum Extent Practicable standard by delaying implementation and compliance efforts addressed in the permittees' stormwater management plans, and by providing language that is not clear, specific, measureable, or enforceable, as addressed in the existing permits. The EPA is enclosing as an example, recommended TMDL language to include in the draft permits proposed for public notice.

## Comment 4b: Antibacksliding of the TMDL

Section 402(o) of the CWA establishes the general rule prohibiting backsliding from effluent limitations contained in previously issued permits that are based on Sections 402(a)(1)(B), 30(b)(1)(C), 303(d), or 303(e). Section 402(o) is intended to prohibit the EPA from allowing permittees to "backslide" or weaken best professional judgment-based limits or Water Quality Based Effluent Limitations contained in permits except for limited circumstances. Permits issued with these limitations may not be reissued, renewed, or modified to contain less stringent effluent limitations than the previous permit unless the proposed new limitations comply with the antidegradation rule contained in §303(d)(4). For this reason, at a minimum, the EPA recommends the redlined/strikeout language from the previous permit remain in the draft permits proposed for public notice.

# Comment 5: Implementation of the Permit in Addressing the Lake Jordan TMDL

The EPA has identified at least 12 MS4s that can be identified in the Lake Jordan TMDL wherein compliance schedules will be extended by North Carolina Session Law 2016-94. Without the justification required by 40 CFR §122.47. For these particular MS4s, many of the BMPs via the MCMs in the stormwater management plans are driven by the proper address and control of pollutants throught the TMDL implementation plan. Prohibitions and indefinite delays on the implementation of these control measures (i.e., ordinances, enforcement measures, BMPs) further threaten the overall water quality of Lake Jordan, as it minimizes the permittee's abiblity to reduce the discharge of pollutants to the maximum extent practicable, protect water quality, and satisfy appropriate water quality requirements of the CWA. As result, it is recommended that NCDENR undertake measures to reistate provisions in the permit consistent with the original timetables for compliance in addressing TMDLs for Lake Jordan.

We consider the concerns and comments above to fall within the possible grounds for potential permit objection described in 123.44(c) and we will carefully review draft permits proposed for public notice under our EPA/North Carolina NPDES Memorandum of Agreement. My staff and I are committed to

working with you to resolve the issues in a manner that ensures the issuance of final permits that are consistent with the requirements of the CWA. We look forward to working with you to achieve that objective. If you have any questions, please feel free to contact Chris Thomas at (404) 562-9459, or Mark Nuhfer at (404) 562-9390, or have your staff contact Mike Mitchell at (404) 562-9303.

Sincerely,

James D. Giattina, Director Water Protection Division

Enclosure



REGION 4 ATLANTA FEDERAL CENTER 61 FORSYTH STREET ATLANTA, GEORGIA 30303-8960

MAR 1 6 2011

Ms. Ann R. Clark
Director, Outreach, Stormwater, Agricultural
and Dams Permitting Division
South Carolina Department of Health
and Environmental Control
2600 Bull Street
Columbia, South Carolina 29201

Subject: Review of Draft General Permit for Small Municipal Separate Storm Sewer Systems - SCR030000

1

Dear Ms. Clark:

Thank you for the opportunity to review the draft National Pollutant Discharge Elimination System permit for small Municipal Separate Storm Sewer Systems. The U.S. Environmental Protection Agency (EPA), Region 4 has completed its review of the draft permit which we received via electronic submission from your office on March 3, 2011. Per the Memorandum of Agreement (MOA) between South Carolina and EPA Region 4, we have completed our review and are providing the following comments for your consideration.

- We commend South Carolina on its inclusion of permit requirements and
  performance standards that reflect clear, specific, measurable and enforceable
  stormwater controls. We also appreciate the high level of cooperation and
  engagement extended by the State with respect to opportunities for our informal
  comment and input prior to your issuance of this permit for public review and
  comment.
- 2. Paragraph 3.3.4 (p. 19) For purposes of clarification, please re-number section 3.3.4 of the permit to 3.3.3.4, as we understand this provision is intended to be a subparagraph of 3.3.3. The subsequent three subparagraphs should be renumbered accordingly (i.e., re-number 3.3.5 to 3.3.4, 3.3.6 to 3.3.5, and 3.3.7 to 3.3.6).
- 3. Paragraphs 4.2.3.4 (p. 32), 4.2.3.5.1 (p. 33), 4.2.6.3.1 (p. 48), 4.2.6.4.1.d.i. (p. 52), 4.2.6.4.2.a. (p.52) We recommend these provisions should clarify the timeframes by which the specified activities are required to be complete.

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4. Paragraph 4.2.6.4.3 (p. 53) – We recommend that a sentence be added at the end of the paragraph to clarify record keeping expectations for maintenance activities at municipally owned facilities (e.g., "The permittee should also maintain a log or database ensuring accurate tracking of any maintenance activities performed, with associated dates, as a result of these inspections.").

As set forth in the MOA, if the State receives significant comments following the issuance of the draft permit for public review, we request an opportunity to review the proposed permit prior to the final issuance. If you have any questions, please feel free to contact Mike Mitchell or my staff at (404) 562-9303.

Sincerely,

Christopher B. Thomas, Chief

Pollution Control and Implementation Branch

Water Protection Division



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MAY 1 4 2018

Paul E. Davis
Director
Division of Water Pollution Control
Tennessee Department of Environment
and Conservation
401 Church Street, 6<sup>th</sup> Floor, L & C Annex
Nashville, Tennessee 37243-1534

Re: Review of Draft General Permit for Small Phase II MS4s (TNS000000)

Dear Mr. Davis:

Thank you for the opportunity to review Tennessee's draft National Pollutant Discharge Elimination System (NPDES) general permit for discharges from small Municipal Separate Storm Sewer Systems (MS4s). The U.S. Environmental Protection Agency (EPA), Region 4, completed its review of the draft permit which was received by our office via electronic notification on March 23, 2010, and we are providing comments per the Memorandum of Agreement between Tennessee and EPA Region 4.

We have been in communication with your staff during the past several months regarding this permit and appreciate the opportunity to share informal comments and feedback based on a preliminary draft copy your office provided. EPA commends Tennessee for the inclusion of requirements and performance standards in the permit that are clear, specific, measurable, and enforceable. We appreciate the emphasis on green infrastructure stormwater pollution controls, particularly with respect to the runoff reduction requirements in section 4.2.5 of the permit. We also appreciate the permit language and provisions regarding the use of the "EPA Water Quality Scorecard" in review and update of local codes and ordinances. These requirements will help ensure that stormwater pollutants discharged from the small MS4s will be reduced to the maximum extent practicable. Furthermore, we have enclosed additional comments for your consideration.

If you have any questions, please call me at (404) 562-9345, or have your staff contact Ms. Alanna Conley of my office at (404) 562-9443.

Sincerely,

James D. Giattina

Director

Water Protection Division

Enclosure

## EPA Comments on Tennessee's Draft Permit for Small MS4s

# Section 3.1. Discharges to Water Quality Impaired Waters

- Tennessee should clarify that requirements for implementing applicable Total Maximum Daily Loads (TMDLs) include EPA-established TMDLs, such as those established in the Harpeth River basin.
  - a. In the second sentence of in section 3.1, we suggest you replace "...TMDL has been developed and approved by EPA..." with "TMDL has been established or approved by EPA..."
  - b. We recommend you edit the last sentence of section 3.1. as follows: "A list of EPA-Approved TMDLs can be found on the division's web site, and EPA-established TMDLs can be accessed on EPA's web site at: <a href="http://www.epa.gov/waters/tmdldocs/Harpeth%20River%20TMDL%20final%20report.pdf">http://www.epa.gov/waters/tmdldocs/Harpeth%20River%20TMDL%20final%20report.pdf</a>.
  - c. In the first sentence of section 3.1.1, we recommend the term "an approved TMDL" should be replaced with the term "an approved or established TMDL."
- Tennessee should provide additional clarification regarding the requirement for implementation of applicable wasteload allocations. We recommend that 3.1.1. be modified as follows: "The MS4 must implement stormwater pollutant reductions consistent with the assumptions and requirements of any applicable wasteload allocation(s) in TMDLs established or approved by EPA. If an MS4 discharges into a waterbody....prescribed by the TMDL. The SWMP must include a schedule for installation of such BMPs. A monitoring component..."

# Section 4.2.5. Permanent Stormwater Management in New Development and Redevelopment

- We recommend that Tennessee provide additional clarification regarding permit expectations to address situations when runoff reduction and/or pollutant reduction cannot be fully accomplished.
  - a. We recommend you edit the third sentence of 4.2.5.3. as follows: "If runoff reduction and/or pollutant removal cannot be <u>fully</u> accomplished <u>on-site per section 4.2.5.3.1.</u>, then the MS4 may propose off-site mitigation and/or payment into a fund for public stormwater projects." In addition, we request you consider moving this sentence to the second paragraph of this section.
  - b. We recommend that you edit the first sentence of section 4.2.5.3.3. as follows: "For projects that cannot meet 100% of the runoff reduction requirements, runoff Runoff reduction measures may be implemented at another location..."
- 4. With respect to the pollutant removal performance standard described in 4.2.5.3.3, we suggest Tennessee consider requiring a performance standard for turbidity levels instead of requiring a performance standard to remove 80% of the total suspended solids.

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MAY 2 5 2016

Ms. Tisha Calabrese-Benton
Director, Division of Water Resources
Tennessee Department of Environment and Conservation
William R. Snodgrass - Tennessee Tower
312 Rosa L. Parks Avenue, 11<sup>th</sup> Floor
Nashville, Tennessee 37243-1102

Dear Ms. Calabrese-Benton:

Thank you for the opportunity to review Tennessee's draft general permit for stormwater discharges from small municipal separate storm sewer systems (MS4s) (Permit No. TNS000000). The U.S. Environmental Protection Agency Region 4 has completed its review of the draft permit, first received by our office via electronic notification on February 26, 2016, and we are providing comments per the Memorandum of Agreement (MOA) between the State of Tennessee and EPA Region 4.

Overall, the permit does include requirements that are clear, specific and measurable. However, we have identified certain sections of the permit where the permit language should be revised to further clarify the requirements. Our detailed comments are enclosed.

The need for clear, specific and measurable requirements is a fundamental requirement of federal law. The Clean Water Act (CWA) requires that MS4 permits "require controls to reduce the discharge of pollutants to the maximum extent practicable (MEP)." When permit provisions are vague or leave it to the permittee to determine what control measures will be chosen and implemented, the permit fails to ensure that required controls will reduce the discharge of pollutants to the MEP. Accordingly, it is the permitting authority's responsibility to establish clear, specific, and measureable requirements that it determines to be components of an MEP-level MS4 program.

In addition, the CWA requires that the public be afforded an opportunity to participate in the development of permit conditions. When a permit includes only vague requirements and improperly empowers permittees to make their own determinations of MEP-level controls, the public is deprived of the opportunity to participate in and make informed comments regarding the development of permit requirements. Moreover, clear, specific, and measurable requirements ensure that the permit will be enforceable and the permittee accountable for compliance. Without these requirements, permittees are left without certainty or clarity as to their compliance obligations and the objectives of the permit may not be achieved.

In providing these comments, the EPA notes that, based on the Tennessee Department of Environment and Conservation's (TDEC) recent 305(b) report, approximately 46.5% of Tennessee's streams and rivers have been assessed, and of those assessed, approximately 47.9% are impaired. Discharges from

MS4s from urban-related runoff/stormwater was one of the top sources of impairment, causing close to 2,439 miles of streams of rivers to not meet their designated uses. (Ref: <a href="https://ofmpub.epa.gov/waters10/attains\_state.control?p\_state=TN&p\_eyele=2012">https://ofmpub.epa.gov/waters10/attains\_state.control?p\_state=TN&p\_eyele=2012</a>). Given the significant impact that urban stormwater runoff has on instream water quality in Tennessee, it is important that TDEC's general permit for discharges from small MS4s meets the requirements of Section 402(p) of the CWA, to include controls which reduce the discharge of pollutants to the MEP, and provide protection of receiving waters.

Despite some of the changes made from the existing permit, the EPA agrees with TDEC's development of permanent stormwater management standards at new development and redevelopment projects to represent the MEP controls. The EPA agrees that the combination of stormwater control measures that rely on infiltration, evapotranspiration, or capture/reuse of the water quality treatment volume (where site-specific conditions allow) is an effective way to achieve pollutant removal. Scientific information supports the view that such techniques provide a higher degree of pollutant removal than other approaches. In addition, experience indicates that such measures are usually practicable to implement. This supports a determination that such measures are an important component of an MEP-level stormwater management program. However, the EPA also believes it is critical to ensure the long-term operation and maintenance of such stormwater control measures. The draft permit removes specific requirements that were included in the existing permit regarding the verification of maintenance responsibilities, inventory and tracking of management practices, specifics on best management plan (BMP) maintenance, and owner/operator inspections. Without specific requirements for ensuring maintenance of these pollutant control measures, the EPA is concerned that the effectiveness of these pollutant controls will be undermined and the level of environmental protection expected by the permit will degrade over time. The removal of such provisions raises questions about whether the permit includes controls that reduce the discharge of pollutants to the MEP, and also raises questions about whether the draft permit reflects impermissible backsliding. TDEC should restore the language and requirements of the existing permit for this issue.

We also note that the draft permit relaxes certain buffer requirements in the existing permit. Protection of riparian buffers is a widely-accepted best management practice for the removal of pollutants from new development and redevelopment projects. As with the removal of requirements for long-term maintenance of post-construction controls, the relaxation of effective buffer requirements that were contained in the existing permit raises questions about whether the permit continues to require MEP-level controls and whether the change reflects prohibited backsliding from the requirement in the existing permit.

As a general comment, we are aware of recent Tennessee legislation that prohibits TDEC from including requirements that are more stringent than federal law requires. As noted above, federal law requires that your permit contain clear, specific, and measurable requirements which reduce the discharge of pollutants to the MEP. Our comments are directed toward ensuring that these minimal federal requirements are met, and any control requirement that is determined to be a component of an MEP-level MS4 program is inherently a requirement of federal law.

We understand that TDEC has received significant public comments objecting to the draft permit, and that TDEC could propose to issue a permit with substantial changes. Copies of some of the significant written comments have been provided to the EPA. Accordingly, Tennessee is required to provide the EPA an opportunity to review the "proposed permit" prior to issuance of a final permit pursuant to Section IV.B. of the MOA. Along with a copy of the proposed permit, the EPA requests that you

provide comments received by TDEC on the draft permit along with TDEC's responsiveness summary responding to those comments.

If you have any questions, please feel free to contact Ms. Mary Kuo of my staff at (404) 562-9847.

Sincerely,

James D. Giattina

Director

Water Protection Division

Enclosure

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## EPA Comments on Tennessee's Draft Small MS4 General NPDES Permit

### Special Conditions

- Waters designated as an Exceptional Tennessee Water must meet certain conditions for new or increased discharges through the Water Quality Standards program. We are pleased to see that the draft permit appropriately identifies these waters under the special conditions section to prevent further degradation of these high quality waters.
- 2. We note that, under 40 CFR § 122.44(d)(1)(vii)(B), all National Pollutant Discharge Elimination System (NPDES) permit must contain effluent limits that are consistent with the assumptions and requirements of an applicable Total Maximum Daily Load (TMDL). In the context of MS4 permitting, because MS4 permit effluent limits are typically BMP-based and expressed as narrative control requirements rather than numeric limits, it is necessary for the MS4 permit to include monitoring and adaptive management requirements to ensure that the MS4 adjusts its controls to the extent necessary to achieve reductions required by a TMDL. Thus, as part of the TMDL implementation requirements, the stormwater management program must contain a monitoring and/or evaluation component to assess the effectiveness of BMPs in achieving any applicable wasteload allocations (WLAs) and the overall compliance with MEP. The draft permit should also include an explicit condition that requires the permittee to re-evaluate and adjust their BMPs should monitoring results show that installed control measures are not working effectively. This type of feedback mechanism for making adjustments and refinements to a permittee's BMP and overall TMDL implementation strategy are critical steps for moving towards achievement of WLAs, as established by TMDLs.

### Illicit Discharge Detection and Elimination (IDDE)

- 3. We suggest that the first sentence of this section be expanded so that permittees are required to evaluate the effectiveness of their IDDE program to confirm whether it is up-to-date and functioning properly: "Currently permitted MS4s shall continue to implement their existing illicit discharge detection and elimination program, following an evaluation of the effectiveness and, if necessary, adjustment of their program."
- 4. The second paragraph of this section states that "new permittees must develop, and existing permittees must continue to develop, update and maintain, a storm sewer system map (preferably Geographic Information System based) that shows the location of system outfalls where the municipal storm sewer system discharges into waters of the state or conveyances owned or operated by another MS4." To make this requirement more clear and specific, a timeframe should be established specifying how often this map must be updated (i.e., annually).
- 5. As part of the storm sewer system map that permittees are required to develop, update and maintain, EPA suggests adding a requirement for permittees to identify priority areas that have a reasonable potential for illicit discharges and field screen stations on the map. A compilation of priority areas and their locations is already required by the permit, but the mapping component is not explicitly

- required. A copy of the storm sewer system map should also be made available onsite for review by the permitting authority.
- 6. The draft permit allows 18 months for an illicit discharge ordinance and ERP to be developed following coverage of the permit. Considering that this is a continuation of a requirement of the existing permit, TDEC should eliminate this requirement for MS4s already covered by the existing Phase II MS4 permit.
- 7. To make the draft permit more clear, specific, and measurable, TDEC should add a timeframe to the following requirement: "Documented illicit discharges should be eliminated as soon as practicable," but no longer than ## days, unless an alternative deadline is approved by TDEC.
- 8. The permit should include the development of a dry weather field screening and analytical monitoring program. The permit does include analytical and non-analytical monitoring components in Section 5 of the permit, but there are not explicit requirements for dry weather field screening and identifying priority areas where the field screening will be conducted. Further, TDEC should set a minimal frequency by which the permittee must screen outfalls during dry weather.

#### Construction

9. The following clarification should be made so that permittees are not only required to evaluate construction site compliance, but are also required to produce inspection reports: "The permittee must have procedures in place for its inspectors to evaluate and document construction site compliance."

#### Post-Construction

- 10. As a general matter, EPA is very supportive of stormwater control measures that maintain rain where it falls using green infrastructure approaches. EPA has been promoting methods that infiltrate, evapotranspire, or capture/reuse rainfall for managing stormwater from new development, redevelopment, and retrofits. The recent National Research Council (NRC) report (Urban Stormwater Management in the United States, National Academies Press, 2008) also recommends that these practices be used as primary stormwater management mechanisms. Please see the enclosed letter of December 23, 2015, from Jim Giattina to Shari Meghreblian for EPA's reiteration of Section 402(p)(3)(B)(iii) of the CWA and how it specifically provides that MS4 permits "shall require controls to reduce the discharge of pollutants to the maximum extent practicable, including management practices, control techniques and system, design and engineering methods, and such other provisions as the Administrator or the State determines appropriate for the control of such pollutants." The statute requires the inclusion of any control measures determined to be necessary to reduce the discharge of pollutants to the maximum extent practicable. This compels the inclusion of controls which will be effective at reducing pollutant discharge by the MS4 as long as they are practicable to implement as part of the suite of pollutant controls required by the permit.
- 11. Under Section 4.2.5.2.1, the draft permit includes an additional site-specific limitation: "g. Other conditions as approved by the permittee and documented in the SWMP." The permit is unclear on

the process of how a permittee submits a site-specific limitation under this permit condition, which is essentially a rationale for not having to meet the permanent stormwater standard to use infiltration, evapotranspiration, or capture/reuse of the entire water quality treatment volume (WQTV). The permit should require that this process include a review and affirmative approval by TDEC to ensure that the "other conditions approved by the permittee" are appropriate, consistent with MEP, and the standard is not rendered optional.

- 12. The draft permit raises the allowable reduction of the WQTV for a new development project up to 20% for each of the listed conditions under Section 4.2.5.2.2. The existing permit allowed only a 10% reduction in the performance standard for somewhat similar conditions, and EPA understood this to be an incentive for redeveloped sites. TDEC should ensure that relaxation of the WQTV is allowed only for meaningful measures that actually offset the reduction in the WQTV. Accordingly, we recommend that TDEC tighten the allowable conditions for receiving reductions of the WQTV. Otherwise, as an example, the permit could allow for new development of clusters of high density, high-rise buildings that receive a 40% reduction in the WQTV, which would likely result in the degradation of water quality.
- 13. Section 4.2.5.3.3. of the draft permit states that permissible land uses or activities may be established within the buffer, with one of the allowable uses being infiltration-based stormwater control measures (SCMs). Please clarify whether or not an owner/operator would be able to place all of its best management practices to treat the entire WQTV within the riparian buffer. Buffers are intended to provide water quality treatment, however, if they are used to also house various SCMs, the overall stormwater treatment train will not be as effective as SCMs and buffers designed and implemented in series.
- 14. The existing permit contains clear and specific permanent stormwater control measure maintenance requirements regarding owner/operator maintenance agreements, which included inspection, transfer of responsibility, and corrective action conditions. Now that this section has been simplified and many of the details have been removed in the draft permit, it is not clear how the permitting authority or the permittees will ensure that control measures are maintained or how permit compliance will be measured. EPA requests that the language of the existing permit on this issue carry over into the new permit. It is not clear how the elimination of these provisions is consistent with the anti-backsliding prohibition of 40 CFR § 122.44(1).
- 15. Appropriate operation and maintenance are critical to the function of any suite of controls, and with some control measures being located on private property, it is important to establish clear and specific permit provisions to assure responsibility and accountability for the operation and maintenance of these controls. The existing permit requires the permittee to ensure the long-term maintenance of post-construction BMPs through a local ordinance or other enforceable policy, but that provision has since been removed in the draft permit. Some of the details that were once in the permit are now in the permit rationale document as suggestions. TDEC should reinstate these verification of maintenance responsibilities conditions, to ensure that long-term maintenance of control measures is performed.

16. The draft permit also removes all the provisions regarding the inventory and tracking of management practices. An inventory system for post-construction BMPs is important to enable the permittee (and the state) to track the type of BMP, locational information, inspection information, and other relevant data for each BMP, and ensure that they continue to be maintained and perform appropriately. Requirements regarding maintenance and inventory/tracking provisions should be reinstated in the final permit, or the maintenance of stormwater assets section of the permit should be expanded to include the elements described in the permit rationale. Instead, the permit rationale explains that TDEC will convene an operation and maintenance committee to develop guidance for operation and maintenance of best practices, but does not provide a timeframe. TDEC should identify MEP-level controls in the final permit instead of deferring the identification of MEP-level controls to a post-permit guidance document. This would enable a permittee to plan out the necessary operation and maintenance activities in the near term instead of waiting for guidance to become available. As noted above, it is the permitting authority's responsibility to identify MEP-level controls in the permit. Moreover, it would seem that these requirements should already have been developed or under development by permittees since they were required in the existing permit.

### Enforcement Response Plan

17. The existing permit allows permittees up to 18 months to develop and implement an ERP. Thus, existing permittees should have them in place by now and do not need an additional 18 months. The permit should be clarified so that existing permittees must maintain their ERP, and that new permittees have 8-18 months to develop and implement an ERP.

## Monitoring

- 18. The draft permit appropriately describes monitoring activities that are required for streams with unavailable parameters for nutrients. As TDEC is well aware, nutrients continue to be identified as one of the top causes of impairment, among other stormwater-related parameters.
- 19. We have heard from MS4s that more flexibility is needed with regards to monitoring requirements, especially for those that want to focus on a particular concern or priority areas/hot spots. EPA understands the rationale behind a new option for a jurisdiction-specific analytical monitoring plan (Option 2). However, the procedural process laid out for Option 2 does raise concern that there does not appear to be a formal approval of the optional monitoring program, as indicated by the permit rationale. Instead, the permittee is to implement an alternative plan and begin implementation upon submittal of the plan, without certainty that the justification for an alternate plan is adequate and without any indication that the adequacy of the plan would be reviewed by TDEC. The permit should make clear that alternative monitoring plans submitted by the permittee are subject to review and approval by TDEC.
- 20. To make the draft permit requirements more clear, specific and measurable, TDEC should consider adding timeframes and/or schedules for the required monitoring activities.



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DEC. 2 3 2015

Ms. Shari Meghreblian, Ph.D.
Deputy Commissioner
Bureau of Environment
Tennessee Department of Environment
and Conservation
312 Rosa L. Parks Avenue
Nashville, Tennessee 37243

Dear Ms. Meghreblian:

The Environmental Protection Agency is aware of concerns expressed by stakeholders in Tennessee with regard to certain National Pollutant Discharge Elimination System (NPDES) permit requirements developed by TDEC in its Municipal Separate Storm Sewer System (MS4) permits. Specifically, we understand that some stakeholders have raised objections to including runoff reduction requirements for new development and redevelopment activities in Tennessee, asserting that the EPA and state permitting authorities lack legal authority to include such conditions. At your request, I would like to take this opportunity to respond to those concerns and make clear the legal basis for such permit requirements. In particular, I will address four specific issues: (1) the legal basis for runoff reduction requirements; (2) the assertion that the Clean Water Act (CWA) only addresses discharges from as opposed to into an MS4 system; (3) the assertion that a retention requirement exceeds NPDES authority because it regulates "flow" rather than pollutants; and (4) the assertion that Virginia Department of Transportation v. EPA, precludes the use of stormwater retention requirements or stormwater flow reduction practices.

The existing TDEC permit condition at issue requires permitted MS4s to control stormwater discharges by managing on-site, at a minimum, the first inch of every rainfall event preceded by 72 hours of no measurable precipitation. This first inch of rainfall must be 100% managed with no stormwater runoff being discharged to surface waters. Green infrastructure measures that infiltrate, evapotranspire, or harvest and use precipitation on site are an increasingly popular method of stormwater management to achieve such retention requirements. The permit also includes a number of flexibilities in connection with these requirements. For example, the permit incentivizes certain types of redevelopment by relaxing the stormwater retention requirement for high density, mixed-use, or transit-oriented development. In addition, there are flexibilities whereby sites that cannot fully accomplish the stormwater retention requirement on-site may propose off-site mitigation or payment into a fund for stormwater projects.

## (1) The legal basis for runoff reduction requirements

Section 402(p)(3)(B)(iii) of the CWA provides that MS4 permits "shall require controls to reduce the discharge of pollutants to the maximum extent practicable, including management practices, control techniques and system, design and engineering methods, and such other provisions as the Administrator or the State determines appropriate for the control of such pollutants." The permit condition at issue is a "management practice" and/or a "control technique." Further, the statute authorizes "such other provisions as the Administrator or the State determines appropriate for the control of such pollutants." The retention requirement in the permit has a clear connection with the reduction of pollutant discharge. There is a strong factual and scientific basis for finding that such retention best management practices have beneficial water quality and pollutant reduction impacts. Moreover, the existence and successful implementation of such requirements in many jurisdictions indicates that such measures are generally "practicable" to implement. Indeed, there are jurisdictions in Tennessee that are successfully implementing the retention requirement. Therefore, we believe the permit conditions developed by TDEC fit squarely within the scope of the CWA's NPDES permitting authority.

In addition to the statutory requirement that MS4 permits require controls to reduce the discharge of pollutants to the maximum extent practicable, NPDES regulations implementing the statute require that such controls include measures to address pollutants discharged from developed and redeveloped sites following construction. For example, regulations applicable to Phase 1 (large and medium) MS4s require "controls to reduce the discharge of pollutants from municipal separate storm sewers which receive discharges from areas of new development and significant redevelopment." 40 CFR § 122.26(d)(2)(iv)(A)(2). This regulation further provides that the requirement for a program to control pollution from new development and significant redevelopment must "address controls to reduce pollutants in discharges from municipal separate storm sewers after construction is completed." Similarly, the regulations applicable to Phase 2 (small) MS4s require the development and implementation of "a program to address storm water runoff from new development and redevelopment projects that disturb greater than or equal to one acre." 40 CFR § 122.34(b)(5). The stormwater retention requirement for new and redeveloped sites that TDEC has included in its MS4 permits is the type of control that is contemplated by these regulations.

# (2) The assertion that the CWA only addresses discharges from as opposed to into an MS4 system

We understand that some concerns have been raised with regard to controls on discharges of pollutants *into* the MS4 instead of controls which address discharges of pollutants *from* the MS4. Section 402(p)(3)(B) plainly contemplates controls into the MS4 as an effective way to control what the MS4 discharges, as opposed to end-of-pipe limits. For example, section 402(p)(3)(B)(ii) requires that MS4

<sup>&</sup>lt;sup>1</sup> The National Research Council issued a 2009 report (<u>Urban Stormwater Management in the United States</u>) evaluating EPA's stormwater management program. See

http://www8.nationalacademies.org/onpinews/newsitem.aspx?RecordID=12465.

<sup>&</sup>lt;sup>2</sup> At least 17 states and the District of Columbia have already implemented retention performance requirements for newly developed and redeveloped sites, and the EPA believes that retention requirements are well within the MEP framework. Those states include VT, NJ, NY, DE, MD, PA, WV, FL, SC, WI, MT, CA, AK, OR, WA, MA, NH, and DC. For additional information, see Summary of State Stormwater Standards (EPA, 2011) at <a href="http://www3.epa.gov/npdes/pubs/sw-state-summary-standards.pdf">http://www3.epa.gov/npdes/pubs/sw-state-summary-standards.pdf</a> and <a href="http://www.epa.gov/sites/production/files/2015-11/documents/sw-ms4">http://www.epa.gov/sites/production/files/2015-11/documents/sw-ms4</a> compendium.pdf.

permits "shall include requirements to effectively prohibit non-stormwater discharges into the storm sewers." Section 402(p)(3)(B)(iii) includes the requirement that MS4 permits "shall require controls to reduce the discharge of pollutants to the maximum extent practicable including management practices, control techniques and system, design and engineering methods, and such other provisions as the Administrator deems appropriate . . . . " Pollution prevention (as opposed to end-of-pipe treatment) is a well-established practice, control technique or other provision to control such pollutants. In implementing this authority, the preamble to the Phase 2 stormwater rule refers to studies and investigations indicating that "prior planning and designing for the minimization of pollutants in storm water discharges is the most cost-effective approach to storm water quality management. Reducing pollutant concentrations in the storm water after the discharge enters a storm sewer system is often more expensive and less efficient than preventing or reducing pollutants at the source." 64 Fed. Reg. 68722, at 68759 (Dec. 8, 1999). Further the preamble states "the requirement for small MS4 operators to develop a program to address discharges resulting from new development and redevelopment is essentially a pollution prevention measure." 64 Fed. Reg. 68722, at 68761 (Dec. 8, 1999). Post-construction measures, such as the retention requirement, are cost-effective pollution prevention measures to reduce pollutants entering an MS4.

# (3) The assertion that a retention requirement exceeds NPDES authority because it regulates "flow"

We understand there is opposition to the permit requirements, contending that a retention requirement exceeds NPDES authority because it seeks to regulate "flow" rather than pollutants, and only pollutants may be controlled by an NPDES permit. The purpose of a retention requirement in an NPDES MS4 permit is to reduce pollutant discharge to the maximum extent practicable in accordance with the statute and regulations. As noted above, Section 402(p)(3)(B)(iii) of the CWA lists a variety of ways for MS4 permits to regulate the discharge of pollutants in stormwater. Further, the EPA noted in the Phase 2 stormwater rule preamble with respect to the post-construction minimum control measure: "In many cases, consideration of the increased flow rate, velocity and energy of storm water discharges following development unavoidably must be taken into consideration in order to reduce the discharge of pollutants, to meet water quality permit conditions and to prevent degradation of receiving streams." 64 Fed. Reg. 68722, at 68761 (Dec. 8, 1999).

# (4) The assertion that Virginia Department of Transportation v. EPA precludes the use of stormwater retention requirements

Some stakeholders cite to a case involving the section of the CWA authorizing Total Maximum Daily Loads (TMDLs) as support for the argument that the CWA does not authorize stormwater retention requirements or any kind of stormwater flow reduction requirement in NPDES MS4 permits. That case, Virginia Department of Transportation v. EPA, 2013 U.S. Dist. LEXIS 981 (E.D.Va. Jan 3, 2013), struck down a TMDL that expressed a load allocation and wasteload allocations for sediment in terms of stormwater flow rate based on the EPA's view that the flow rate from storm events served as a surrogate for sediment pollutant loads. The court held that this was not authorized because the statutory section authorizing TMDLs, CWA Section 303(d)(1)(C), specifically requires the setting of a TMDL "for those pollutants which the Administrator identifies ... as suitable for such calculation." Since the court's decision turned on the specific language of Section 303(d)(1)(C), it has no bearing on the EPA's authority to regulate "stormwater discharges," as expressly required under CWA Section 402(p)(6), or to require various types of controls under CWA Section 402(p)(3)(B)(iii). For more explanation on the EPA's authority to require retention requirements in MS4 permits, see the EPA's briefs before EPA's

Environmental Appeals Board defending two EPA-issued permits to MS4s at Department of Defense facilities in Regions 8 and 10.3

If you should have any questions, or would like to discuss this letter further, please contact me at (404) 562-9470, or have your staff contact Ms. Mary Kuo at (404) 562-9847.

Sincerely,

James D. Giattina

Director

Water Protection Division

http://yosemite.epa.gov/oa/eab\_web\_docket.nsf/Filings%20By%20Appeal%20Number/4CEBE347DDC7341485257C43005 09261/\$File/2013-12-13%20FINAL%20Buckley%20Response%20Brief.pdf (Buckley Air Force Base Muncipal Separate Storm Sewer System);

http://yosemite.epa.gov/oa/eab\_web\_docket.nsf/Filings%20By%20Appeal%20Number/F5E7F66427F9D63E85257C620050 86DF/\$File/Region%2010%20Response%20Brief%20(FILED).pdf (Joint Base Lewis McChord Muncipal Separate Storm Sewer System)